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ABSTRACT

Data on demographic and employment characteristics of United States doctoral scientists and engineers are presented in detailed statistical tables. These data (which reflect the results of the 1983 Survey of Doctorate Recipients, the sixth in a biennial series that began in 1973) were obtained from individuals who received science or engineering (SE) doctorates between 1940 and 1982 or who had received doctorates during this same time period in non-SE fields but were employed in SE positions. Characteristics considered include: sex; age; race; citizenship; employment status; primary work activity; salaries; academic rank; SE field; years of professional experience; and geographic location. In addition, selected data from the previous surveys (1973, 1975, 1977, 1979, and 1981) are provided in separate tables. These time-series tables present data on the total population, total employed labor force, and employed women as well as data relating to doctoral scientists and engineers employed in educational institutions, business and industry, and the federal government. Technical notes (including information on survey methodology, coverage, concepts, definitions, and sampling errors) and a copy of the questionnaire used in the survey are included. (JN)

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characteristics of doctoral scientists and engineers in the united states: 1983

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Characteristics of Doctoral Scientists and Engineers in the United States: 1983 (Detailed Statistical Tables) (NSF 85-303)(Washington, D.C., 1985).

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general notes

These tables present data on the demographic and employment characteristics of the Nation's doctoral scientists and engineers. This population consists of individuals in the United States who held science or engineering (S/E) doctorates or who had received doctorates in non-S/E fields but were employed in S/E positions.

The data presented in this report reflect the results of the 1983 Survey of Doctorate Recipients, the sixth in a biennial series that began in 1973. The population for the 1983 survey includes individuals who had received doctorates between January 1, 1940, and June 30, 1982. All surveys in this series encompass a 42-year period of Ph. D. cohorts. To maintain the length of this time span for each biennial survey, the two most recent graduating cohorts of Ph. D.'s are added to the population, and the two oldest are eliminated.

In addition to the detailed statistical results of the 1983 survey, this report contains selected data from the previous surveys (1973, 1975, 1977, 1979, and 1981). These time-series tables present data on the total population and the total employed labor force as well as employment data relating to doctoral scientists and engineers in the major employment sectors of the economy.

Caution should be exercised in using published data from this survey series to trace historical trends. For example, the race/ethnic data presented in this report reflect modifications based on analysis of response patterns of individuals. These modifications are expected to result in data that are more accurate and stable over time. The race/ethnic data appearing in the time-series tables in this report are based on these modifications and may differ significantly from earlier published estimates.

Detailed results and technical aspects of the 1983 survey are presented in three sections of this report. The technical notes in section A contain information on survey methodology, coverage, concepts, definitions, and sampling errors. Section B contains detailed tabulations from the 1983 survey. The questionnaire and specialties list used in the 1983 survey are reproduced in section C.

Requests for additional information should be addressed to John A. Scopino, Demographic Studies Group, Division of Science Resources Studies, National Science Foundation, Washington, D.C. 20550 (202) 634-4664.

time-series tables 1973, 1975, 1977, 1979, 1981, and 1983

selected characteristics of doctoral scientists and engineers

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The 1983 data appearing in this report are not comparable to earlier estimates in this survey series. Caution should be used, therefore, in using published data to develop historical trends. The data in these time-series tables, however, have been adjusted and may be used for this purpose.

TABLE 1. CHARACTERISTICS OF THE TOTAL POPULATION OF DOCTORAL SCIENTISTS AND ENGINEERS IN THE U.S.

	1973		1975		1977	
CHARACTERISTIC	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
TOTAL	238,831	100.0	270,355	100.0	304,067	100.0
FIELD						
SCIENTISTS	201,549	84.4	226,856	83.9	257,514	84.7
PHYSICAL SCIENTISTS	53,081	22.2	58,462	21.6	62,227	20.5
CHEMISTS	34,011	14.2	38,469	14.2	40,864	13.4
PHYSICISTS/ASTRONOMERS	19,070	8.0	19,993	7.4	21,363	7.0
MATHEMATICAL SCIENTISTS	13,068	5.5	14,190	5.2	15,411	5.1
MATHEMATICIANS	11,552	4.8	12,419	4.6	13,614	4.5
STATISTICIANS	1,516	.6	1,771	.7	1,797	.6
COMPUTER/INFORMATION SPE	2,754	1.2	3,533	1.3	5,822	1.9
ENVIRONMENTAL SCIENTISTS	10,926	4.6	12,473	4.6	13,562	4.5
EARTH SCIENTISTS	9,069	3.8	9,801	3.6	10,162	3.3
OCEANOGRAPHERS	1,196	.5	1,311	.5	1,609	.5
ATMOSPHERIC SCIENTISTS	661	.3	1,361	.5	1,791	.6
LIFE SCIENTISTS	62,117	26.0	68,295	25.3	76,769	25.2
BIOLOGICAL SCIENTISTS	40,591	17.0	42,623	15.8	46,514	15.3
AGRICULTURAL SCIENTISTS	9,986	4.2	11,544	4.3	12,840	4.2
MEDICAL SCIENTISTS	11,540	4.8	14,128	5.2	17,415	5.7
PSYCHOLOGISTS	27,076	11.3	31,276	11.6	35,609	11.7
SOCIAL SCIENTISTS	32,527	13.6	38,627	14.3	48,114	15.8
ECONOMISTS	10,772	4.5	12,643	4.7	13,957	4.6
SOCIOLOGISTS/ANTHRO	7,220	3.0	8,495	3.1	10,323	3.4
OTHER SOCIAL SCIENTISTS	14,535	6.1	17,489	6.5	23,834	7.8
ENGINEERS	37,282	15.6	43,499	16.1	46,553	15.3
AERO/ASTRO ENGINEERS	1,701	.7	2,059	.8	2,116	.7
CHEMICAL ENGINEERS	4,792	2.0	5,599	2.1	5,887	1.9
CIVIL ENGINEERS	3,193	1.3	3,819	1.4	4,138	1.4
ELEC./ELECTRON. ENGINEERS	7,312	3.1	8,753	3.2	8,510	2.8
MECHANICAL ENGINEERS	3,376	1.4	4,108	1.5	4,822	1.6
NUCLEAR ENGINEERS	1,269	.5	1,690	.6	1,825	.6
OTHER ENGINEERS	15,639	6.5	17,471	6.5	19,255	6.3
SEX						
MEN	217,998	91.3	244,844	90.6	272,299	89.6
WOMEN	20,833	8.7	25,511	9.4	31,768	10.4
RACE						
WHITE	218,645	91.5	245,372	90.8	275,356	90.6
BLACK	2,191	.9	2,628	1.0	2,812	.9
ASIAN/PACIFIC ISLANDER	10,854	4.5	13,536	5.2	16,736	5.5
AM. INDIAN/ALSKN NATIVE	171	.1	214	.1	244	.1
OTHER	219	.1	253	.1	201	.1
NO REPORT	6,751	2.8	7,952	2.9	8,718	2.9
ETHNICITY						
HISPANIC	1,716	.7	2,097	.8	2,782	.9
NONHISPANIC	88,229	36.9	107,558	39.8	150,005	49.3
NO REPORT	148,886	62.3	160,700	59.4	151,280	49.8
AGE						
UNDER 30	10,162	4.3	9,841	3.6	8,868	2.9
30-34	52,066	21.8	56,880	21.0	55,469	18.2
35-39	43,626	18.3	54,565	20.2	68,747	22.6
40-44	36,735	15.4	40,715	15.1	46,406	15.3
45-49	31,245	13.1	34,212	12.7	38,959	12.8
50-54	25,287	10.6	29,414	10.9	32,093	10.6
55-59	16,813	7.0	19,121	7.1	23,893	7.9
60-64	10,489	4.4	12,514	4.6	15,021	4.9
65 & OVER	12,058	5.0	12,781	4.7	14,267	4.7
NO REPORT	350	.1	312	.1	344	.1
EMPLOYMENT STATUS						
FULL-TIME EMPLOYED	208,380	87.2	240,470	88.9	267,817	88.1
SCIENCE/ENGINEERING	195,203	81.7	225,948	83.6	246,080	80.9
OTHER/UNKNOWN FIELD	13,177	5.5	14,522	5.4	21,737	7.1
PART-TIME EMPLOYED	6,276	2.6	7,319	2.7	7,483	2.5
SCIENCE/ENGINEERING	5,454	2.3	6,248	2.3	6,354	2.1
OTHER/UNKNOWN FIELD	822	.3	1,071	.4	1,129	.4
POSTDOCTORATES	5,676	2.4	8,151	3.0	9,755	3.2
UNEMPLOYED/SEEKING EMPL	2,514	1.1	2,471	.9	3,319	1.1
NOT EMPLOYED/NOT SEEKING	1,455	.6	2,375	.9	2,834	.9
RETIRED	6,959	2.9	8,638	3.2	9,803	3.2
OTHER	2,312	1.0	440	.2	541	.2
NO REPORT	5,259	2.2	491	.2	2,515	.8

NOTE: PERCENTS MAY NOT ADD TO 100 BECAUSE OF ROUNDING.

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TABLE 1. CHARACTERISTICS OF THE TOTAL POPULATION OF DOCTORAL SCIENTISTS AND ENGINEERS IN THE U.S. CONTINUED

CHARACTERISTICS	1979		1981		1983	
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
TOTAL	332,918	100.0	364,157	100.0	395,033	100.0
FIELD						
SCIENTISTS	281,261	84.5	305,787	84.0	331,247	83.9
PHYSICAL SCIENTISTS	64,540	19.4	67,642	18.6	69,579	17.6
CHEMISTS	42,914	12.9	45,336	12.4	45,569	11.5
PHYSICISTS/ASTRONOMERS	21,626	6.5	22,306	6.1	24,010	6.1
MATHEMATICAL SCIENTISTS	16,008	4.8	16,450	4.5	17,357	4.4
MATHEMATICIANS	13,544	4.1	13,810	3.8	14,470	3.7
STATISTICIANS	2,464	.7	2,640	.7	2,887	.7
COMPUTER/INFORMATION SPEC	6,703	2.0	9,082	2.5	12,304	3.1
ENVIRONMENTAL SCIENTISTS	15,061	4.5	16,433	4.5	17,141	4.3
EARTH SCIENTISTS	11,518	3.5	12,438	3.4	13,077	3.3
OCEANOGRAPHERS	1,685	.5	1,829	.5	1,798	.5
ATMOSPHERIC SCIENTISTS	1,858	.6	2,166	.6	2,266	.6
LIFE SCIENTISTS	84,837	25.5	91,935	25.2	101,401	25.7
BIOLOGICAL SCIENTISTS	49,657	14.9	54,360	14.9	60,919	15.4
AGRICULTURAL SCIENTISTS	13,731	4.1	14,739	4.0	16,005	4.1
MEDICAL SCIENTISTS	21,449	6.4	22,836	6.3	24,477	6.2
PSYCHOLOGISTS	40,130	12.1	45,007	12.4	49,716	12.6
SOCIAL SCIENTISTS	53,984	16.2	59,238	16.3	63,749	16.1
ECONOMISTS	14,921	4.5	17,098	4.7	18,107	4.6
SOCIOLOGISTS/ANTHRO	11,045	3.3	11,945	3.3	13,426	3.4
OTHER SOCIAL SCIENTISTS	28,018	8.4	30,205	8.3	32,216	8.2
ENGINEERS	51,655	15.5	58,370	16.0	63,786	16.1
AERO/ASTRO ENGINEERS	2,468	.7	2,537	.7	3,724	.9
CHEMICAL ENGINEERS	6,643	2.0	7,612	2.1	7,713	2.0
CIVIL ENGINEERS	5,207	1.6	6,233	1.7	5,504	1.4
ELEC./ELECTRON. ENGINEERS	8,791	2.6	10,794	3.0	13,081	3.3
MECHANICAL ENGINEERS	5,423	1.6	5,576	1.5	5,923	1.5
NUCLEAR ENGINEERS	2,286	.7	2,061	.6	2,331	.6
OTHER ENGINEERS	20,837	6.3	2[illegible],357	6.5	25,510	6.5
SEX						
MEN	294,927	88.6	318,445	87.4	340,482	86.2
WOMEN	37,991	11.4	45,712	12.6	54,551	13.8
RACE						
WHITE	301,710	90.6	327,169	89.8	352,276	89.2
BLACK	3,523	1.1	4,513	1.2	5,273	1.3
ASIAN/PACIFIC ISLANDER	23,563	7.1	28,311	7.8	30,910	7.8
AM. INDIAN/ALSKN NATIVE	404	.1	421	.1	443	.1
OTHER	127	*	220	.1	205	.1
NO REPORT	3,591	1.1	3,523	1.0	5,926	1.5
ETHNICITY						
HISPANIC	4,188	1.3	5,018	1.4	5,646	1.4
NONHISPANIC	285,062	35.6	325,754	89.5	338,826	85.8
NO REPORT	43,668	13.1	33,385	9.2	50,561	12.8
AGE						
UNDER 30	7,923	2.4	8,457	2.3	6,810	1.7
30-34	54,744	16.4	52,882	14.5	49,709	12.5
35-39	77,158	23.2	78,797	21.6	78,484	19.9
40-44	55,300	16.6	68,534	18.8	82,646	20.9
45-49	41,111	12.3	44,964	12.3	53,263	13.5
50-54	33,972	10.2	37,641	10.3	41,019	10.4
55-59	27,699	8.3	31,188	8.6	33,658	8.5
60-64	17,927	5.4	21,258	5.8	25,334	6.4
65 & OVER	16,904	5.1	20,379	5.6	23,757	6.0
NO REPORT	180	.1	57	*	353	.1
EMPLOYMENT STATUS						
FULL-TIME EMPLOYED	293,282	88.1	322,684	88.6	341,912	86.6
SCIENCE/ENGINEERING	269,193	80.9	295,045	81.0	303,484	76.8
OTHER/UNKNOWN FIELD	24,089	7.2	27,639	7.6	38,428	9.7
PART-TIME EMPLOYED	10,777	3.2	10,821	3.0	16,463	4.2
SCIENCE/ENGINEERING	9,080	2.7	9,211	2.5	13,390	3.4
OTHER/UNKNOWN FIELD	1,697	.5	1,610	.4	3,073	.8
POSTDOCTORATES	10,198	3.1	10,451	2.9	10,945	2.8
UNEMPLOYED/SEEKING EMPL.	2,936	.9	2,675	.7	3,674	.9
NOT EMPLOYED/NOT SEEKING	3,577	1.1	3,353	.9	3,686	.9
RETIRED	10,473	3.1	12,404	3.4	13,815	3.5
OTHER	825	.2	397	.1	790	.2
NO REPORT	850	.3	1,372	.4	3,748	.9

* LESS THAN .05 PERCENT.
NOTE: PERCENTS MAY NOT ADD TO 100 BECAUSE OF ROUNDING.
SOURCE: NATIONAL SCIENCE FOUNDATION

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TABLE 2. SELECTED CHARACTERISTICS OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS IN THE U.S.

CHARACTERISTICS	1973			1975			1977		
	NUMBER	PERCENT	MEDIAN ANNUAL SALARY	NUMBER	PERCENT	MEDIAN ANNUAL SALARY	NUMBER	PERCENT	MEDIAN ANNUAL SALARY
TOTAL	220,332	100.0	20,700	255,940	100.0	23,200	285,055	100.0	25,600
FIELD									
SCIENTISTS	184,551	83.8	20,400	213,507	83.4	22,600	240,005	84.2	24,900
PHYSICAL SCIENTISTS	48,526	22.0	21,000	54,629	21.3	23,900	57,531	20.2	26,600
CHEMISTS	30,769	14.0	21,000	35,825	14.0	24,000	37,412	13.1	25,600
PHYSICISTS/ASTRONOMERS	17,757	8.1	21,000	18,804	7.3	23,700	20,119	7.1	26,500
MATHEMATICAL SCIENTISTS	12,130	5.5	19,200	13,611	5.3	21,200	14,609	5.1	23,300
MATHEMATICIANS	10,661	4.8	19,000	11,864	4.6	20,900	12,846	4.5	23,100
STATISTICIANS	1,469	.7	20,900	1,747	.7	23,100	1,763	.6	25,100
COMPUTER/INFORMATION SPEC	2,713	1.2	21,700	3,528	1.4	23,400	5,767	2.0	25,800
ENVIRONMENTAL SCIENTISTS	10,321	4.7	20,700	12,103	4.7	23,500	13,001	4.6	25,900
EARTH SCIENTISTS	8,552	3.9	20,700	9,500	3.7	23,600	9,715	3.4	25,900
OCEANOGRAPHERS	1,130	.5	19,700	1,277	.5	22,100	1,563	.5	24,100
ATMOSPHERIC SCIENTISTS	639	.3	22,500	1,326	.5	24,200	1,723	.6	28,500
LIFE SCIENTISTS	56,665	25.7	20,100	63,344	24.7	22,200	70,537	24.7	24,700
BIOLOGICAL SCIENTISTS	36,798	16.7	19,400	39,036	15.3	21,300	42,069	14.8	23,800
AGRICULTURAL SCIENTISTS	9,189	4.2	19,700	10,993	4.3	21,800	12,112	4.2	24,500
MEDICAL SCIENTISTS	10,678	4.8	22,700	13,315	5.2	25,700	16,356	5.7	27,900
PSYCHOLOGISTS	24,782	11.2	20,200	30,001	11.7	22,100	33,652	11.8	24,100
SOCIAL SCIENTISTS	29,414	13.3	20,300	36,291	14.2	22,200	44,908	15.8	24,300
ECONOMISTS	9,674	4.4	22,000	11,814	4.6	24,400	12,970	4.5	26,900
SOCIOLOGISTS/ANTHRO.	6,531	3.0	19,400	7,910	3.1	20,600	9,471	3.3	22,200
OTHER SOCIAL SCIENTISTS	13,209	6.0	19,500	16,567	6.5	21,100	22,467	7.9	23,300
ENGINEERS	35,781	16.2	22,300	42,433	16.6	25,200	45,050	15.8	28,600
AERO/ASTRO ENGINEERS	1,670	.8	24,200	2,019	.8	25,200	1,987	.7	27,800
CHEMICAL ENGINEERS	4,458	2.0	22,400	5,368	2.1	26,400	5,603	2.0	30,700
CIVIL ENGINEERS	3,100	1.4	20,400	3,772	1.5	22,900	4,066	1.4	26,000
ELEC./ELECTRON. ENGINEERS	7,057	3.2	22,500	8,538	3.3	25,000	8,284	2.9	29,000
MECHANICAL ENGINEERS	3,257	1.5	21,500	4,033	1.6	23,800	4,648	1.6	27,300
NUCLEAR ENGINEERS	1,264	.6	22,500	1,680	.7	25,500	1,773	.6	29,500
OTHER ENGINEERS	14,975	6.8	22,600	17,023	6.7	25,700	18,689	6.6	28,800
SEX									
MEN	203,407	92.3	21,000	233,877	91.4	23,500	257,465	90.3	26,000
WOMEN	16,925	7.7	17,400	22,063	8.6	19,100	27,590	9.7	20,700
RACE									
WHITE	202,224	91.8	20,800	232,510	90.8	23,300	257,993	90.5	25,700
BLACK	2,048	.9	20,800	2,513	1.0	22,800	2,709	1.0	23,600
ASIAN/PACIFIC ISLANDER	10,322	4.7	19,400	13,549	5.3	21,600	16,260	5.7	23,900
AM. INDIAN/ALSKN NATIVE	141	.1	**	211	.1	19,100	237	.1	22,900
OTHER	196	.1	17,700	243	.1	20,600	175	.1	24,400
NO REPORT	5,401	2.5	20,200	6,914	2.7	23,400	7,681	2.7	26,000
ETHNICITY									
HISPANIC	1,568	.7	19,100	2,008	.8	22,500	2,641	.9	23,900
NONHISPANIC	83,344	37.8	21,000	103,334	40.4	23,000	142,077	49.8	24,700
NO REPORT	135,420	61.5	20,600	150,598	58.8	23,200	140,337	49.2	26,500
AGE									
UNDER 30	9,686	4.4	15,400	9,538	3.7	16,900	8,479	3.0	18,500
30-34	49,686	22.6	17,300	55,167	21.6	18,800	53,569	18.8	20,400
35-39	42,086	19.1	19,600	53,529	20.9	21,500	66,722	23.4	23,600
40-44	35,294	16.0	21,800	40,094	15.7	24,200	45,267	15.9	26,500
45-49	29,924	13.6	24,100	33,564	13.1	26,200	37,942	13.3	29,100
50-54	24,100	10.9	24,900	28,727	11.2	28,100	31,086	10.9	30,800
55-59	15,580	7.1	25,200	18,390	7.2	28,100	22,609	7.9	31,600
60-64	9,002	4.1	25,600	11,245	4.4	28,600	13,138	4.6	31,300
65 & OVER	4,874	2.2	24,700	5,492	2.1	27,600	6,030	2.1	31,100
NO REPORT	100	*	**	194	.1	24,100	213	.1	24,900
TYPE OF EMPLOYMENT									
SCIENCE/ENGINEERING	206,295	93.6	20,700	240,223	93.9	23,100	261,924	91.9	25,500
OTHER/UNKNOWN FIELD	14,037	6.4	22,600	15,717	6.1	24,300	23,131	8.1	27,200
SECTOR OF EMPLOYMENT									
BUSINESS/INDUSTRY	53,403	24.2	23,300	64,621	25.2	26,000	71,562	25.1	29,900
EDUCATIONAL INSTITUTIONS	129,343	58.7	19,100	149,076	58.2	21,400	163,768	57.5	23,700
4-YEAR COLLEGES/UNIV	124,841	56.7	19,200	143,615	56.1	21,500	157,088	55.1	23,800
2-YEAR COLLEGES	2,962	1.3	17,800	3,567	1.4	19,100	4,642	1.6	20,900
ELEMENTARY/SEC.SCHOOLS	1,540	.7	19,300	1,394	.7	20,400	2,038	.7	22,500
HOSPITALS/CLINICS	4,543	2.1	19,400	7,482	2.9	21,800	8,619	3.0	23,600
NONPROFIT ORGANIZATION	8,003	3.6	21,700	8,334	3.3	24,400	10,195	3.6	26,900
FEDERAL GOVERNMENT	18,205	8.3	23,500	18,996	7.4	26,300	21,389	7.5	29,700
MILITARY/COMM. CORPS	1,967	.9	**	2,130	.8	**	2,282	.8	**
STATE GOVERNMENT	3,001	1.4	19,400	3,015	1.2	20,900	3,770	1.3	21,600
OTHER GOVERNMENT	1,253	.6	19,000	1,878	.7	22,900	1,538	.5	22,100
OTHER	331	.2	21,000	82	*	**	582	.2	37,500
NO REPORT	284	.1	**	326	.1	**	1,350	.5	**
PRIMARY WORK ACTIVITY									
RESEARCH AND DEVELOPMENT	71,464	32.4	20,500	82,371	32.2	23,000	93,471	32.8	25,600
BASIC RESEARCH	34,256	15.5	19,900	38,137	14.9	22,200	43,551	15.3	24,600
APPLIED RESEARCH	28,706	13.0	20,800	32,903	12.9	23,400	36,444	12.8	26,300
DEVELOPMENT/DESIGN	8,502	3.9	20,800	11,331	4.4	23,600	13,476	4.7	26,100
MANAGEMENT/ADMINISTRATION+	46,157	20.9	26,000	51,737	20.2	29,600	60,696	21.3	31,900
OF R&D	26,223	11.9	26,200	28,657	11.2	30,100	30,783	10.8	33,100
OF OTHER	19,934	9.0	25,700	23,080	9.0	28,600	29,913	10.5	30,600
TEACHING	79,949	36.3	18,600	91,102	35.6	20,600	90,830	31.9	22,600
CONSULTING	4,055	1.8	22,500	5,516	2.2	25,500	6,149	2.2	28,200
SALES/PROF. SERVICES	8,064	3.7	20,600	11,660	4.6	21,900	15,233	5.3	24,800
OTHER	6,955	3.2	20,600	7,482	2.9	22,100	12,845	4.5	24,700
NO REPORT	3,688	1.7	21,600	6,073	2.4	23,700	5,831	2.0	25,400
FEDERAL SUPPORT STATUS									
RECEIVING SUPPORT	99,555	45.2	21,400	110,171	43.0	24,100	119,854	42.0	26,500
NOT RECEIVING SUPPORT	110,830	50.3	20,400	136,836	53.5	22,700	153,213	53.7	25,100
STATUS UNKNOWN	6,850	3.1	17,900	6,649	2.6	19,800	7,501	2.6	21,700
NO REPORT	3,097	1.4	22,600	2,284	.9	22,300	4,487	1.6	24,800

* LESS THAN .05 PERCENT.

** NO MEDIAN COMPUTED FOR GROUPS WITH FEWER THAN 20 INDIVIDUALS REPORTING SALARY.

+ THE CLASSIFICATION OF "MANAGEMENT/ADMINISTRATION" ACTIVITIES CHANGED IN 1979. SEE TECHNICAL NOTES, "PRIMARY WORK ACTIVITY," P. 4 FOR EXPLANATION.

NOTE: PERCENTS MAY NOT ADD TO 100 BECAUSE OF ROUNDING. MEDIAN SALARY COMPUTED FOR FULL-TIME EMPLOYED CIVILIANS ONLY.

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TABLE 2. SELECTED CHARACTERISTICS OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS IN THE U.S. CONTINUED

CHARACTERISTICS	1979			1981			1983		
	NUMBER	PERCENT	MEDIAN ANNUAL SALARY	NUMBER	PERCENT	MEDIAN ANNUAL SALARY	NUMBER	PERCENT	MEDIAN ANNUAL SALARY
TOTAL	314,257	100.0	29,100	343,956	100.0	34,700	369,320	100.0	40,100
FIELD									
SCIENTISTS	263,915	84.0	28,200	286,917	83.4	33,300	307,775	83.3	38,200
PHYSICAL SCIENTISTS	60,222	19.2	30,300	63,110	18.3	36,200	63,986	17.3	42,300
CHEMISTS	39,659	12.6	30,400	41,910	12.2	36,200	41,298	11.2	41,900
PHYSICISTS/ASTRONOMERS	20,563	6.5	30,300	21,200	6.2	36,100	22,688	6.1	42,900
MATHEMATICAL SCIENTISTS	15,250	4.9	26,400	15,569	4.5	31,700	16,379	4.4	36,600
MATHEMATICIANS	12,843	4.1	26,100	13,074	3.8	30,900	13,589	3.7	36,400
STATISTICIANS	2,407	.8	29,400	2,545	.7	3[illegible],600	2,790	.8	37,400
COMPUTER/INFORMATION SPEC	6,584	2.1	28,600	9,064	2.6	34,400	12,164	3.3	40,400
ENVIRONMENTAL SCIENTISTS	14,575	4.6	30,300	15,909	4.6	36,400	16,467	4.5	40,900
EARTH SCIENTISTS	11,083	3.5	30,300	11,990	3.5	36,900	12,523	3.4	41,500
OCEANOGRAPHERS	1,662	.5	28,800	1,793	.5	31,800	1,742	.5	36,700
ATMOSPHERIC SCIENTISTS	1,830	.6	31,400	2,126	.6	36,300	2,202	.6	41,600
LIFE SCIENTISTS	78,857	25.1	28,100	84,912	24.7	33,000	92,802	25.1	37,300
BIOLOGICAL SCIENTISTS	45,617	14.5	26,500	49,621	14.4	31,600	55,205	14.9	36,200
AGRICULTURAL SCIENTISTS	12,789	4.1	28,400	13,496	3.9	32,800	14,536	3.9	37,900
MEDICAL SCIENTISTS	20,451	6.5	30,900	21,795	6.3	37,700	23,061	6.2	41,200
PSYCHOLOGISTS	37,848	12.0	26,700	42,829	12.5	30,700	46,645	12.6	35,800
SOCIAL SCIENTISTS	50,479	16.1	26,600	55,524	16.1	31,000	59,332	16.1	36,000
ECONOMISTS	13,978	4.4	30,900	15,990	4.6	36,400	16,958	4.6	41,400
SOCIOLOGISTS/ANTHRO.	10,198	3.2	24,000	11,007	3.2	28,400	12,056	3.3	32,100
OTHER SOCIAL SCIENTISTS	26,303	8.4	25,400	28,527	8.3	29,800	30,318	8.2	35,000
ENGINEERS	50,342	16.0	33,100	57,039	16.6	40,200	61,545	16.7	46,600
AERO/ASTRO ENGINEERS	2,364	.8	30,900	2,519	.7	41,300	3,684	1.0	47,500
CHEMICAL ENGINEERS	6,166	2.0	36,400	7,146	2.1	42,900	6,992	1.9	50,600
CIVIL ENGINEERS	5,157	1.6	29,900	6,089	1.8	37,400	5,317	1.4	42,500
ELEC./ELECTRON. ENGINEERS	8,597	2.7	34,800	10,630	3.1	41,200	12,696	3.4	48,600
MECHANICAL ENGINEERS	5,245	1.7	30,800	5,370	1.6	38,700	5,657	1.5	45,500
NUCLEAR ENGINEERS	2,286	.7	32,700	2,061	.6	38,300	2,329	.6	46,200
OTHER ENGINEERS	20,527	6.5	33,400	23,224	6.8	39,700	24,870	6.7	46,200
SEX									
MEN	280,857	89.4	29,900	302,971	88.1	35,600	320,494	86.8	40,800
WOMEN	33,400	10.6	23,100	40,985	11.9	27,000	48,826	13.2	31,700
RACE									
WHITE	284,474	90.5	29,300	308,562	89.7	34,900	328,455	88.9	40,200
BLACK	3,227	1.0	26,200	4,224	1.2	31,800	4,948	1.3	37,000
ASIAN/PACIFIC ISLANDER	22,890	7.3	28,300	27,331	7.9	34,200	29,740	8.1	40,100
AM. INDIAN/ALSKN NATIVE	397	.1	26,600	406	.1	32,700	418	.1	36,200
OTHER	119	*	22,400	213	.1	30,200	202	.1	31,800
NO REPORT	3,150	1.0	28,400	3,220	.9	35,300	5,557	1.5	36,300
ETHNICITY									
HISPANIC	4,065	1.3	28,200	4,805	1.4	33,100	5,365	1.5	37,200
NONHISPANIC	271,096	86.3	29,100	308,255	89.6	34,600	316,750	85.8	40,200
NO REPORT	39,096	12.4	29,700	30,896	9.0	36,200	47,205	12.8	38,900
AGE									
UNDER 30	7,508	2.4	21,300	8,233	2.4	26,100	6,464	1.8	30,300
30-34	52,784	16.8	22,800	51,355	14.9	27,400	48,157	13.0	31,600
35-39	75,628	24.1	26,600	77,053	22.4	31,400	75,963	20.6	35,900
40-44	54,462	17.3	30,300	67,436	19.6	35,500	80,283	21.7	40,400
45-49	40,230	12.8	32,100	44,133	12.8	37,500	51,832	14.0	44,200
50-54	33,185	10.6	34,100	36,681	10.7	40,200	39,762	10.8	44,700
55-59	26,669	8.5	36,000	29,949	8.7	41,400	31,902	8.6	46,200
60-64	15,504	4.9	35,900	18,796	5.5	41,200	22,569	6.1	48,500
65 & OVER	8,141	2.6	36,300	10,299	3.0	42,000	12,135	3.3	47,300
NO REPORT	146	*	**	21	*	**	253	.1	**
TYPE OF EMPLOYMENT									
SCIENCE/ENGINEERING	288,221	91.7	29,000	314,547	91.4	34,600	327,401	88.6	40,100
OTHER/UNKNOWN FIELD	26,036	8.3	30,800	29,409	8.6	36,600	41,919	11.4	41,100
SECTOR OF EMPLOYMENT									
BUSINESS/INDUSTRY	82,858	26.4	33,700	99,126	28.8	40,300	113,463	30.7	47,000
EDUCATIONAL INSTITUTIONS	174,483	55.5	26,400	187,011	54.4	31,100	196,050	53.1	36,200
4-YEAR COLLEGES/UNIV	167,433	53.3	26,500	179,224	52.1	31,300	187,554	50.8	36,300
2-YEAR COLLEGES	4,574	1.5	24,700	5,032	1.5	28,200	5,421	1.5	32,000
ELEMENTARY/SEC.SCHOOLS	2,476	.8	25,800	2,755	.8	28,600	3,075	.8	31,300
HOSPITALS/CLINICS	9,740	3.1	26,300	9,877	2.9	31,100	10,435	2.8	34,700
NONPROFIT ORGANIZATION	12,454	4.0	30,400	12,601	3.7	34,900	11,894	3.2	39,800
FEDERAL GOVERNMENT	23,946	7.6	33,400	25,124	7.3	40,300	25,793	7.0	44,700
MILITARY/COMM. CORPS	2,304	.7	**	2,084	.6	**	2,090	.6	**
STATE GOVERNMENT	4,185	1.3	23,500	4,454	1.3	29,300	5,142	1.4	34,000
OTHER GOVERNMENT	1,938	.6	23,800	2,104	.6	27,200	2,575	.7	33,700
OTHER	943	.3	42,700	992	.3	61,500	1,002	.3	65,700
NO REPORT	1,406	.4	**	583	.2	**	876	.2	**
PRIMARY WORK ACTIVITY									
RESEARCH AND DEVELOPMENT	99,687	31.7	29,200	120,052	34.9	35,200	124,788	33.8	40,500
BASIC RESEARCH	47,908	15.2	27,700	55,181	16.0	33,100	57,137	15.5	37,900
APPLIED RESEARCH	36,770	11.7	30,000	46,510	13.5	36,000	47,374	12.8	41,300
DEVELOPMENT/DESIGN	15,009	4.8	30,800	18,361	5.3	36,500	20,277	5.5	43,100
MANAGEMENT/ADMINISTRATION+	72,314	23.0	35,000	60,515	17.6	43,200	61,813	16.7	50,600
OF R&D	43,084	13.7	35,900	32,709	9.5	45,800	31,418	8.5	53,800
OF OTHER	29,230	9.3	32,600	27,806	8.1	39,900	30,395	8.2	45,000
TEACHING	92,242	29.4	25,200	105,150	30.6	30,100	108,236	29.3	34,800
CONSULTING	9,012	2.9	31,500	12,065	3.5	39,600	12,746	3.5	46,500
SALES/PROF. SERVICES	21,126	6.7	29,000	25,757	7.5	34,800	29,820	8.1	38,000
OTHER	15,686	5.0	30,100	16,475	4.8	34,600	24,163	6.5	40,500
NO REPORT	4,190	1.3	29,900	3,942	1.1	35,300	7,754	2.1	37,600
FEDERAL SUPPORT STATUS									
RECEIVING SUPPORT	126,586	40.3	30,200	126,892	36.9	35,500	143,936	39.0	40,800
NOT RECEIVING SUPPORT	171,094	54.4	28,500	161,022	46.8	33,900	190,194	51.5	39,600
STATUS UNKNOWN	9,226	2.9	24,700	6,320	1.8	28,800	7,912	2.1	33,900
NO REPORT	7,351	2.3	30,800	49,722	14.5	36,000	27,278	7.4	39,000

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SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE 3. SELECTED CHARACTERISTICS OF DOCTORAL SCIENTISTS AND ENGINEERS EMPLOYED BY EDUCATIONAL INSTITUTIONS

CHARACTERISTICS	1973 NUMBER	1973 PERCENT	1973 % OF TOTAL EMPLD	1973 MEDIAN ANNUAL SALARY	1975 NUMBER	1975 PERCENT	1975 % OF TOTAL EMPLD	1975 MEDIAN ANNUAL SALARY	1977 NUMBER	1977 PERCENT	1977 % OF TOTAL EMPLD	1977 MEDIAN ANNUAL SALARY
TOTAL	129,343	100.0	56.7	19,100	149,076	100.0	58.2	21,400	163,768	100.0	57.5	[illegible]
FIELD												
SCIENTISTS	116,327	89.9	63.0	18,900	134,151	90.0	62.8	21,000	147,851	90.3	61.6	23,300
PHYSICAL SCIENTISTS	22,013	17.0	45.4	18,300	25,670	17.2	47.0	21,100	27,118	16.6	47.1	23,600
CHEMISTS	11,924	9.2	38.8	17,900	14,240	9.6	39.7	20,600	14,849	9.1	39.7	22,800
PHYSICISTS/ASTRONOMERS	10,089	7.8	56.8	18,900	11,430	7.7	60.8	22,000	12,269	7.5	61.0	24,400
MATHEMATICAL SCIENTISTS	10,467	8.1	86.3	18,600	11,719	7.9	86.1	20,500	12,223	7.5	83.7	22,700
MATHEMATICIANS	9,401	7.3	88.2	18,400	10,403	7.0	87.7	20,400	10,983	6.7	85.5	22,600
STATISTICIANS	1,066	.8	72.6	19,800	1,316	.9	75.3	22,200	1,240	.8	70.3	23,500
COMPUTER/INFORMATION SPEC	1,374	1.1	50.6	21,100	1,714	1.1	48.6	22,700	2,128	1.3	36.9	24,400
ENVIRONMENTAL SCIENTISTS	5,190	4.0	50.3	18,800	5,962	4.0	49.3	21,000	6,285	3.8	48.3	23,600
EARTH SCIENTISTS	4,195	3.2	49.1	18,600	4,597	3.1	48.4	20,900	4,604	2.8	47.4	23,300
OCEANOGRAPHERS	689	.5	61.0	19,200	800	.5	62.6	19,700	971	.6	62.1	23,600
ATMOSPHERIC SCIENTISTS	306	.2	47.9	21,500	565	.4	42.6	23,200	710	.4	41.2	25,400
LIFE SCIENTISTS	38,245	29.6	67.5	18,800	42,546	28.5	67.2	20,900	46,865	28.6	66.4	23,500
BIOLOGICAL SCIENTISTS	26,799	20.7	72.8	18,500	28,871	19.4	74.0	20,400	30,776	18.8	73.2	22,800
AGRICULTURAL SCIENTISTS	5,569	4.3	60.6	18,600	6,538	4.4	59.5	20,700	7,017	4.3	57.9	23,400
MEDICAL SCIENTISTS	5,877	4.5	55.0	21,200	7,137	4.8	53.6	24,100	9,072	5.5	55.5	25,900
PSYCHOLOGISTS	15,038	11.6	60.7	19,200	17,643	11.8	58.8	21,000	18,512	11.3	55.0	22,700
SOCIAL SCIENTISTS	24,000	18.6	81.6	19,500	28,897	19.4	79.6	21,200	34,720	21.2	77.3	23,300
ECONOMISTS	7,063	5.5	73.0	20,600	8,208	5.5	69.5	22,700	8,782	5.4	67.7	25,100
SOCIOLOGISTS/ANTHRO	6,002	4.6	91.9	19,200	7,339	4.9	92.8	20,500	8,533	5.2	90.1	22,100
OTHER SOCIAL SCIENTISTS	10,935	8.5	82.8	18,800	13,350	9.0	80.6	20,400	17,405	10.6	77.5	22,700
ENGINEERS	13,016	10.1	36.4	20,600	14,925	10.0	35.2	23,600	15,917	9.7	35.3	26,500
AERO/ASTRO ENGINEERS	410	.3	24.6	21,800	542	.4	26.8	24,000	561	.3	28.2	26,900
CHEMICAL ENGINEERS	1,037	.8	23.3	21,600	1,204	.8	22.4	24,600	1,180	.7	21.1	28,000
CIVIL ENGINEERS	1,706	1.3	55.0	20,100	1,982	1.3	52.5	22,700	2,211	1.4	54.4	25,500
ELEC./ELECTRON. ENGINEERS	2,828	2.2	40.1	20,600	3,154	2.1	36.9	23,800	3,290	2.0	39.7	27,100
MECHANICAL ENGINEERS	1,620	1.3	49.7	20,600	1,813	1.2	45.0	22,600	2,038	1.2	43.8	26,100
NUCLEAR ENGINEERS	306	.2	24.2	21,000	516	.3	30.7	24,700	514	.3	29.0	27,700
OTHER ENGINEERS	5,109	3.9	34.1	20,500	5,714	3.8	33.6	23,600	6,123	3.7	32.8	26,800
SEX												
MEN	117,217	90.6	57.6	19,400	133,588	89.6	57.1	21,800	144,908	88.5	56.3	24,200
WOMEN	12,126	9.4	71.6	16,800	15,488	10.4	70.2	18,500	18,860	11.5	68.4	20,100
RACE												
WHITE	118,311	91.5	58.5	19,200	135,529	90.9	58.3	21,400	149,066	91.0	57.8	23,800
BLACK	1,395	1.1	68.1	19,900	1,756	1.2	69.9	22,000	1,798	1.1	66.4	22,200
ASIAN/PACIFIC ISLANDER	5,855	4.5	56.7	18,100	7,237	4.9	53.4	20,500	7,877	4.8	48.4	22,500
AM. INDIAN/ALSKN NATIVE	131	.1	92.9	**	166	.1	78.7	18,700	171	.1	72.2	22,700
OTHER	135	.1	68.9	**	147	.1	60.5	20,400	137	.1	78.3	24,500
NO REPORT	3,516	2.7	65.1	19,200	4,241	2.8	61.3	22,100	4,719	2.9	61.4	24,100
ETHNICITY												
HISPANIC	941	.7	60.0	18,000	1,218	.8	60.7	21,100	1,690	1.0	64.0	21,400
NONHISPANIC	50,940	39.4	61.1	19,400	62,207	41.7	60.2	21,400	83,698	51.1	58.9	22,900
NO REPORT	77,462	59.9	57.2	19,000	85,651	57.5	56.9	21,400	78,380	47.9	55.9	24,300
AGE												
UNDER 30	5,914	4.6	61.1	14,500	5,811	3.9	60.9	15,800	5,421	3.3	63.9	17,500
30-34	29,019	22.4	58.4	15,900	31,253	21.0	56.7	17,500	30,166	18.4	56.3	18,700
35-39	24,931	19.3	58.2	18,200	31,015	20.8	57.9	19,700	37,204	22.7	55.8	21,600
40-44	20,785	16.1	58.0	20,200	23,666	15.9	59.0	22,400	25,927	15.8	57.3	24,600
45-49	17,510	13.5	58.5	22,400	19,955	13.4	59.5	24,500	22,457	13.7	59.2	26,600
50-54	13,688	10.6	56.8	23,600	16,476	11.1	57.4	26,300	18,041	11.0	58.0	29,300
55-59	8,957	6.9	57.5	23,800	10,960	7.4	59.6	26,300	13,190	8.1	58.3	29,800
60-64	5,524	4.3	61.4	24,600	6,704	4.5	59.6	26,800	7,808	4.8	59.4	30,400
65 & OVER	2,990	2.3	61.3	24,100	3,170	2.1	57.7	27,100	3,464	2.1	57.4	30,500
NO REPORT	25	*	25.0	**	66	*	34.0	**	90	.1	42.3	**
TYPE OF EMPLOYMENT												
SCIENCE/ENGINEERING	121,695	94.1	59.0	19,100	140,402	94.2	58.4	21,300	151,909	92.8	58.0	23,600
OTHER/UNKNOWN FIELD	7,648	5.9	54.5	20,700	8,674	5.8	55.2	23,300	11,859	7.2	51.3	25,400
PRIMARY WORK ACTIVITY												
RESEARCH AND DEVELOPMENT	30,724	23.8	43.0	18,800	35,612	23.9	43.2	21,200	42,621	26.0	45.6	23,700
BASIC RESEARCH	22,486	17.4	65.6	18,700	25,342	17.0	66.4	20,900	30,045	18.3	69.0	23,400
APPLIED RESEARCH	7,622	5.9	26.6	18,900	9,580	6.4	29.1	21,500	11,088	6.8	30.4	24,200
DEVELOPMENT/DESIGN	616	.5	7.2	18,500	690	.5	6.1	22,500	1,488	.9	11.0	22,100
MANAGEMENT/ADMINISTRATION+	13,609	10.5	29.5	24,600	15,413	10.3	29.8	27,700	20,195	12.3	33.3	30,200
OF R&D	4,548	3.5	17.3	23,800	5,144	3.5	18.0	28,000	6,155	3.8	20.0	30,500
OF OTHER	9,061	7.0	45.5	24,900	10,269	6.9	44.5	27,600	14,040	8.6	46.9	30,100
TEACHING	78,887	61.0	98.7	18,600	90,281	60.6	99.1	20,600	89,741	54.8	98.8	22,600
CONSULTING	544	.4	13.4	18,700	549	.4	10.0	22,600	955	.6	15.5	24,000
SALES/PROF. SERVICES	1,672	1.3	20.7	18,700	2,545	1.7	21.8	19,900	3,266	2.0	21.4	22,200
OTHER	1,771	1.4	25.5	20,300	1,271	.9	17.0	19,500	4,306	2.6	33.5	23,800
NO REPORT	2,136	1.7	57.9	20,500	3,405	2.3	56.1	22,300	2,684	1.6	46.0	24,900

* LESS THAN .05 PERCENT.

** NO MEDIAN COMPUTED FOR GROUPS WITH FEWER THAN 20 INDIVIDUALS REPORTING SALARY.

+ THE CLASSIFICATION OF "MANAGEMENT/ADMINISTRATION" ACTIVITIES CHANGED IN 1979. SEE TECHNICAL NOTES, "PRIMARY WORK ACTIVITY," P. 4 FOR EXPLANATION.

NOTE: PERCENTS MAY NOT ADD TO 100 BECAUSE OF ROUNDING. MEDIAN SALARY COMPUTED FOR FULL-TIME EMPLOYED CIVILIANS ONLY.

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TABLE 3. SELECTED CHARACTERISTICS OF DOCTORAL SCIENTISTS AND ENGINEERS EMPLOYED BY EDUCATIONAL INSTITUTIONS CONTINUED

CHARACTERISTICS	1979				1981				1983			
	NUMBER	PERCENT	% OF TOTAL EMPLD	MEDIAN ANNUAL SALARY	NUMBER	PERCENT	% OF TOTAL EMPLD	MEDIAN ANNUAL SALARY	NUMBER	PERCENT	% OF TOTAL EMPLD	MEDIAN ANNUAL SALARY
TOTAL	174,483	100.0	55.5	26,400	187,011	100.0	54.4	31,100	196,050	100.0	53.1	36,200
FIELD												
SCIENTISTS	157,409	90.2	59.6	26,000	168,969	90.4	58.9	30,600	175,730	89.[illegible]	57.1	35,500
PHYSICAL SCIENTISTS	27,300	15.6	45.3	26,400	28,225	15.1	44.7	31,800	27,931	14.2	43.7	37,200
CHEMISTS	15,201	8.7	38.3	25,500	15,675	8.4	37.4	30,800	15,037	7.7	36.4	35,600
PHYSICISTS/ASTRONOMERS	12,099	6.9	58.8	27,700	12,550	6.7	59.2	33,500	12,894	6.6	56.8	40,100
MATHEMATICAL SCIENTISTS	12,550	7.2	82.3	25,500	12,719	6.8	81.7	30,400	13,244	6.8	80.9	35,600
MATHEMATICIANS	10,720	6.1	83.5	25,300	10,998	5.9	84.4	30,400	11,365	5.8	83.6	35,400
STATISTICIANS	1,830	1.0	76.0	26,900	1,721	.9	67.6	31,000	1,879	1.0	67.3	36,300
COMPUTER/INFORMATION SPEC	2,404	1.4	36.0	25,700	3,010	1.6	33.2	30,700	4,031	2.1	33.1	37,600
ENVIRONMENTAL SCIENTISTS	6,146	3.5	42.2	26,700	6,741	3.6	42.4	31,200	6,682	3.4	40.6	36,200
EARTH SCIENTISTS	4,618	2.6	41.7	26,600	4,965	2.7	41.4	31,700	4,658	2.4	37.2	36,600
OCEANOGRAPHERS	789	.5	47.5	26,700	987	.5	55.0	28,300	1,082	.6	62.1	31,700
ATMOSPHERIC SCIENTISTS	739	.4	40.4	27,300	789	.4	37.1	31,500	942	.5	42.8	34,700
LIFE SCIENTISTS	51,673	29.6	65.5	26,400	55,762	29.8	65.7	30,900	58,906	30.0	63.5	35,700
BIOLOGICAL SCIENTISTS	32,929	18.9	72.2	25,200	35,783	19.1	72.1	29,900	38,046	19.4	68.9	34,800
AGRICULTURAL SCIENTISTS	7,048	4.0	55.1	27,100	7,635	4.1	56.6	30,900	8,189	4.2	56.3	35,900
MEDICAL SCIENTISTS	11,696	6.7	57.2	30,000	12,344	6.6	56.6	35,400	12,671	6.5	54.9	38,900
PSYCHOLOGISTS	19,845	11.4	52.4	25,600	21,675	11.6	50.6	29,100	22,182	11.3	47.6	33,600
SOCIAL SCIENTISTS	37,490	21.5	74.3	25,600	40,837	21.8	73.5	29,700	42,754	21.8	72.1	34,400
ECONOMISTS	9,129	5.2	65.3	28,600	10,630	5.7	66.5	33,300	11,362	5.8	67.0	37,600
SOCIOLOGISTS/ANTHRO	8,821	5.1	86.5	24,000	9,303	5.0	84.5	28,400	10,369	5.3	86.0	31,800
OTHER SOCIAL SCIENTISTS	19,540	11.2	74.3	24,900	20,904	11.2	73.3	29,100	21,023	10.7	69.3	33,800
ENGINEERS	17,074	9.8	33.9	30,000	18,042	9.6	31.6	36,400	20,320	10.4	33.0	42,500
AERO/ASTRO ENGINEERS	783	.4	33.1	28,700	675	.4	26.8	36,800	865	.4	23.5	44,600
CHEMICAL ENGINEERS	1,129	.6	18.3	30,900	1,380	.7	19.3	40,000	1,722	.9	24.6	41,700
CIVIL ENGINEERS	2,722	1.6	52.8	28,100	2,887	1.5	47.4	34,100	3,138	1.6	59.0	40,800
ELEC./ELECTRON. ENGINEERS	2,930	1.7	34.1	31,600	3,592	1.9	33.8	38,200	3,960	2.0	31.2	43,300
MECHANICAL ENGINEERS	2,235	1.3	42.6	29,400	2,138	1.1	39.8	36,700	2,578	1.3	45.6	43,100
NUCLEAR ENGINEERS	858	.5	37.5	32,500	634	.3	30.8	36,800	674	.3	28.9	46,100
OTHER ENGINEERS	6,417	3.7	31.3	29,700	6,736	3.6	29.0	36,300	7,383	3.8	29.7	42,300
SEX												
MEN	152,561	87.4	54.3	27,000	161,176	86.2	53.2	32,000	166,734	85.0	52.0	36,900
WOMEN	21,922	12.6	65.6	22,300	25,835	13.8	63.0	25,700	29,316	15.0	60.0	30,200
RACE												
WHITE	159,152	91.2	55.9	26,500	169,468	90.6	54.9	31,200	176,580	90.1	53.8	36,300
BLACK	2,106	1.2	65.3	24,400	2,852	1.5	67.5	30,400	3,329	1.7	67.3	34,600
ASIAN/PACIFIC ISLANDER	10,974	6.3	47.9	25,400	12,348	6.6	45.2	30,500	12,779	6.5	43.0	34,800
AM. INDIAN/ALSKN NATIVE	297	.2	74.8	25,000	270	.1	66.5	28,700	294	.1	70.3	35,100
OTHER	62	*	52.1	**	103	.1	48.4	**	92	*	45.5	**
NO REPORT	1,892	1.1	60.1	27,700	1,970	1.1	61.2	30,800	2,976	1.5	53.6	33,400
ETHNICITY												
HISPANIC	2,228	1.3	54.8	24,700	2,546	1.4	53.0	29,000	2,796	1.4	52.2	33,100
NONHISPANIC	150,414	86.2	55.5	26,400	166,247	88.9	53.9	30,900	167,558	85.5	52.9	36,300
NO REPORT	21,841	12.5	55.9	27,500	18,218	9.7	59.0	33,500	[illegible],694	13.1	54.4	35,300
AGE												
UNDER 30	4,552	2.6	60.6	19,200	4,531	2.4	55.0	22,300	3,558	1.8	55.0	26,500
30-34	28,496	16.3	54.0	20,600	27,826	14.9	54.2	24,000	24,361	12.4	50.6	27,200
35-39	39,715	22.8	52.5	23,800	38,259	20.5	49.7	27,600	36,683	18.7	48.3	30,800
40-44	29,419	16.9	54.0	27,500	35,790	19.1	53.1	31,400	40,903	20.9	50.9	36,000
45-49	23,702	13.6	58.9	29,500	24,576	13.1	55.7	34,600	27,598	14.1	53.2	39,900
50-54	19,481	11.2	58.7	31,300	21,433	11.5	58.4	36,400	23,446	12.0	59.0	40,700
55-59	15,561	8.9	58.3	33,100	17,458	9.3	58.3	38,800	19,020	9.7	59.6	43,700
60-64	9,264	5.3	59.8	34,000	11,161	6.0	59.4	39,600	13,271	6.8	58.8	45,200
65 & OVER	4,265	2.4	52.4	35,300	5,960	3.2	57.9	40,600	7,060	3.6	58.2	45,800
NO REPORT	28	*	19.2	**	17	*	81.0	**	150	.1	59.3	**
TYPE OF EMPLOYMENT												
SCIENCE/ENGINEERING	161,433	92.5	56.0	26,300	173,115	92.6	55.0	30,900	175,895	89.7	53.7	36,200
OTHER/UNKNOWN FIELD	13,050	7.5	50.1	28,400	13,896	7.4	47.3	34,200	20,155	10.3	48.1	36,700
PRIMARY WORK ACTIVITY												
RESEARCH AND DEVELOPMENT	46,842	26.8	47.0	26,400	52,580	28.1	43.8	31,600	54,722	27.9	43.9	36,600
BASIC RESEARCH	33,276	19.1	69.5	26,300	37,814	20.2	68.5	31,100	39,530	20.2	69.2	36,200
APPLIED RESEARCH	12,483	7.2	33.9	26,800	13,725	7.3	29.5	32,600	13,649	7.0	28.8	37,300
DEVELOPMENT/DESIGN	1,083	.6	7.2	25,400	1,041	.6	5.7	31,700	1,543	.8	7.6	39,700
MANAGEMENT/ADMINISTRATION+	26,631	15.3	36.8	31,300	18,929	10.1	31.3	39,500	20,726	10.6	33.5	45,600
OF R&D	8,297	4.8	19.3	32,300	4,396	2.4	13.4	42,600	3,024	1.5	9.6	50,700
OF OTHER	18,334	10.5	62.7	31,000	14,533	7.8	52.3	38,800	17,702	9.0	58.2	44,100
TEACHING	91,184	52.3	98.9	25,200	104,099	55.7	99.0	30,000	105,850	54.0	97.8	34,700
CONSULTING	949	.5	10.5	28,100	984	.5	8.2	32,700	757	.4	5.9	37,200
SALES/PROF. SERVICES	3,793	2.2	18.0	26,300	4,904	2.6	19.0	30,400	5,271	2.7	17.7	31,700
OTHER	3,794	2.2	24.2	28,200	3,628	1.9	22.0	32,000	4,254	2.2	17.6	36,900
NO REPORT	1,290	.7	30.8	29,200	1,887	1.0	47.9	34,300	4,470	2.3	57.6	35,700

* LESS THAN .05 PERCENT.

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NOTE: PERCENTS MAY NOT ADD TO 100 BECAUSE OF ROUNDING. MEDIAN SALARY COMPUTED FOR FULL-TIME EMPLOYED CIVILIANS ONLY.
SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE 4. SELECTED CHARACTERISTICS OF DOCTORAL SCIENTISTS AND ENGINEERS EMPLOYED IN BUSINESS AND INDUSTRY

	1973				1975				1977			
CHARACTERISTICS	NUMBER	PERCENT	% OF TOTAL EMPLD	MEDIAN ANNUAL SALARY	NUMBER	PERCENT	% OF TOTAL EMPLD	MEDIAN ANNUAL SALARY	NUMBER	PERCENT	% OF TOTAL EMPLD	MEDIAN ANNUAL SALARY
TOTAL	53,403	100.0	24.2	23,300	64,621	100.0	25.2	26,000	71,562	100.0	25.1	29,900
FIELD												
SCIENTISTS	35,631	66.7	19.3	23,300	42,502	65.8	19.9	26,000	48,694	68.0	20.3	29,700
PHYSICAL SCIENTISTS	19,665	36.8	40.5	22,700	22,131	34.2	40.5	25,900	23,006	32.1	40.0	29,900
CHEMISTS	15,759	29.5	51.2	22,500	18,099	28.0	50.5	25,900	18,687	26.1	49.9	29,900
PHYSICISTS/ASTRONOMERS	3,906	7.3	22.0	23,600	4,032	6.2	21.4	25,900	4,319	6.0	21.5	29,700
MATHEMATICAL SCIENTISTS	864	1.6	7.1	24,100	1,048	1.6	7.7	25,600	1,312	1.8	9.0	27,400
MATHEMATICIANS	657	1.2	6.2	23,900	831	1.3	7.0	26,000	1,006	1.4	7.8	27,400
STATISTICIANS	207	.4	14.1	25,100	217	.3	12.4	24,500	306	.4	17.4	27,200
COMPUTER/INFORMATION SPEC	1,007	1.9	37.1	22,300	1,423	2.2	40.3	24,000	3,058	4.3	53.0	26,700
ENVIRONMENTAL SCIENTISTS	2,204	4.1	21.4	22,600	2,918	4.5	24.1	26,200	3,103	4.3	23.9	28,600
EARTH SCIENTISTS	2,085	3.9	24.4	22,500	2,671	4.1	28.1	26,500	2,693	3.8	27.7	28,600
OCEANOGRAPHERS	94	.2	8.3	**	76	.1	6.0	**	135	.2	8.6	**
ATMOSPHERIC SCIENTISTS	25	*	3.9	**	171	.3	12.9	22,600	275	.4	16.0	29,300
LIFE SCIENTISTS	7,147	13.4	12.6	23,300	8,655	13.4	13.7	25,400	9,734	13.6	13.8	28,500
BIOLOGICAL SCIENTISTS	3,309	6.2	9.0	22,600	3,483	5.4	8.9	24,900	3,976	5.6	9.5	27,400
AGRICULTURAL SCIENTISTS	1,718	3.2	18.7	21,600	2,341	3.6	21.3	22,600	2,520	3.5	20.8	25,700
MEDICAL SCIENTISTS	2,120	4.0	19.9	26,300	2,831	4.4	21.3	29,700	3,238	4.5	19.8	33,100
PSYCHOLOGISTS	3,081	5.8	12.4	30,000	4,112	6.4	13.7	30,500	5,528	7.7	16.4	33,300
SOCIAL SCIENTISTS	1,663	3.1	5.7	27,200	2,215	3.4	6.1	28,600	2,953	4.1	6.6	30,300
ECONOMISTS	1,031	1.9	10.7	29,200	1,410	2.2	11.9	30,800	1,744	2.4	13.4	34,100
SOCIOLOGISTS/ANTHRO	125	.2	1.9	**	94	.1	1.2	**	193	.3	2.0	**
OTHER SOCIAL SCIENTISTS	507	.9	3.8	25,200	711	1.1	4.3	22,800	1,016	1.4	4.5	25,900
ENGINEERS	17,772	33.3	49.7	23,200	22,119	34.2	52.1	26,100	22,868	32.0	50.8	30,000
AERO/ASTRO ENGINEERS	639	1.2	38.3	25,300	808	1.3	40.0	25,900	799	1.1	40.2	27,500
CHEMICAL ENGINEERS	3,246	6.1	72.8	22,700	3,921	6.1	73.0	27,300	4,099	5.7	73.2	31,300
CIVIL ENGINEERS	883	1.7	28.5	21,500	1,144	1.8	30.3	24,300	1,195	1.7	29.5	27,100
ELEC./ELECTRON. ENGINEERS	3,424	6.4	48.5	23,600	4,605	7.1	53.9	25,900	3,915	5.5	47.3	30,400
MECHANICAL ENGINEERS	1,366	2.6	41.9	22,300	1,790	2.8	44.4	24,500	2,108	2.9	45.4	28,700
NUCLEAR ENGINEERS	666	1.2	52.7	23,100	930	1.4	55.4	25,400	962	1.3	54.3	29,200
OTHER ENGINEERS	7,548	14.1	50.4	23,600	8,921	13.8	52.4	26,400	9,706	13.7	52.4	29,700
SEX												
MEN	52,040	97.4	25.6	23,300	62,482	96.7	26.7	26,100	68,577	95.8	26.6	30,000
WOMEN	1,363	2.6	8.1	20,200	2,139	3.3	9.7	22,200	2,985	4.2	10.8	24,400
RACE												
WHITE	48,926	91.6	24.2	23,600	58,002	89.8	24.9	26,400	63,274	88.4	24.5	30,200
BLACK	298	.6	14.6	23,000	351	.5	14.0	24,400	426	.6	15.7	27,800
ASIAN/PACIFIC ISLANDER	3,099	5.8	30.0	20,800	4,630	7.2	34.2	22,600	6,090	8.5	37.5	24,800
AM. INDIAN/ALSKN NATIVE	5	*	3.5	**	21	*	10.0	**	40	.1	16.9	**
OTHER	31	.1	15.8	**	20	*	8.2	**	12	*	6.9	**
NO REPORT	1,044	2.0	19.3	23,000	1,597	2.5	23.1	25,800	1,720	2.4	22.4	30,300
ETHNICITY												
HISPANIC	264	.5	16.8	21,200	342	.5	17.0	25,500	447	.6	16.9	27,900
NONHISPANIC	16,859	31.6	20.2	24,200	22,603	35.0	21.9	26,100	31,588	44.1	22.2	28,400
NO REPORT	36,280	67.9	26.8	22,900	41,676	64.5	27.7	26,000	39,527	55.2	28.2	30,400
AGE												
UNDER 30	1,999	3.7	20.6	17,800	2,061	3.2	21.6	19,800	1,768	2.5	20.9	21,300
30-34	12,267	23.0	24.7	20,100	14,828	22.9	26.9	21,900	13,632	19.0	25.4	24,100
35-39	10,435	19.5	24.8	22,500	13,771	21.3	25.7	25,300	18,205	25.4	27.3	28,200
40-44	8,520	16.0	24.1	24,900	9,995	15.5	24.9	28,100	11,393	15.9	25.2	31,100
45-49	7,098	13.3	23.7	26,800	7,974	12.3	23.8	30,700	9,024	12.6	23.8	34,300
50-54	6,288	11.8	26.1	27,800	7,379	11.4	25.7	31,000	7,323	10.2	23.6	36,000
55-59	3,874	7.3	24.9	27,600	4,595	7.1	25.0	31,700	5,567	7.8	24.6	36,000
60-64	1,957	3.7	21.7	27,900	2,716	4.2	24.2	31,400	3,159	4.4	24.0	36,500
65 & OVER	932	1.7	19.1	25,800	1,217	1.9	22.2	30,400	1,418	2.0	23.5	36,300
NO REPORT	33	.1	33.0	**	85	.1	43.8	**	73	.1	34.3	**
TYPE OF EMPLOYMENT												
SCIENCE/ENGINEERING	49,398	92.5	23.9	23,100	60,101	93.0	25.0	26,000	65,043	90.9	24.8	29,700
OTHER/UNKNOWN FIELD	4,005	7.5	20.5	25,700	4,520	7.0	28.8	27,300	6,519	9.1	28.2	32,400
PRIMARY WORK ACTIVITY												
RESEARCH AND DEVELOPMENT	23,758	44.5	33.2	21,300	28,735	44.5	34.9	24,000	31,347	43.8	33.5	27,100
BASIC RESEARCH	3,525	6.6	10.3	21,600	4,251	6.6	11.1	24,400	4,631	6.5	10.6	27,400
APPLIED RESEARCH	13,212	24.7	46.0	21,300	15,112	23.4	45.9	24,100	16,545	23.1	45.4	27,400
DEVELOPMENT/DESIGN	7,021	13.1	82.6	21,100	9,372	14.5	82.7	23,800	10,171	14.2	75.5	26,700
MANAGEMENT/ADMINISTRATION+	19,840	37.2	43.0	27,000	22,678	35.1	43.8	30,600	23,945	33.5	39.5	34,600
OF R&D	14,242	26.7	54.3	26,300	15,718	24.3	54.8	30,400	15,917	22.2	51.7	34,300
OF OTHER	5,598	10.5	28.1	29,400	6,960	10.8	30.2	32,000	8,028	11.2	26.8	35,200
TEACHING	191	.4	.2	**	182	.3	.2	**	245	.3	.3	25,500
CONSULTING	2,781	5.2	68.6	25,100	4,050	6.3	73.4	25,800	4,141	5.8	67.3	30,000
SALES/PROF. SERVICES	3,001	5.6	37.2	25,400	4,401	6.8	37.7	27,400	6,270	8.8	41.2	30,700
OTHER	2,988	5.6	43.0	21,700	3,220	5.0	43.0	24,100	4,423	6.2	34.4	26,200
NO REPORT	844	1.6	22.9	23,200	1,355	2.1	22.3	26,300	1,191	1.7	20.4	26,000

* LESS THAN .05 PERCENT.
** NO MEDIAN COMPUTED FOR GROUPS WITH FEWER THAN 20 INDIVIDUALS REPORTING SALARY.
+ THE CLASSIFICATION OF "MANAGEMENT/ADMINISTRATION" ACTIVITIES CHANGED IN 1979. SEE TECHNICAL NOTES, "PRIMARY WORK ACTIVITY," P. 4 FOR EXPLANATION.
NOTE: PERCENTS MAY NOT ADD TO 100 BECAUSE OF ROUNDING. MEDIAN SALARY COMPUTED FOR FULL-TIME EMPLOYED CIVILIANS ONLY.

TABLE 4. SELECTED CHARACTERISTICS OF DOCTORAL SCIENTISTS AND ENGINEERS EMPLOYED IN BUSINESS AND INDUSTRY
CONTINUED

CHARACTERISTICS	1979 NUMBER	1979 PERCENT	1979 % OF TOTAL EMPLD	1979 MEDIAN ANNUAL SALARY	1981 NUMBER	1981 PERCENT	1981 % OF TOTAL EMPLD	1981 MEDIAN ANNUAL SALARY	1983 NUMBER	1983 PERCENT	1983 % OF TOTAL EMPLD	1983 MEDIAN ANNUAL SALARY
TOTAL	82,858	100.0	26.4	33,700	99,126	100.0	28.8	40,300	113,463	100.0	30.7	47,000
FIELD												
SCIENTISTS	56,341	68.0	21.3	33,100	67,338	67.9	23.5	39,600	78,963	69.6	25.7	45,500
PHYSICAL SCIENTISTS	24,989	30.2	41.5	33,100	27,409	27.7	43.4	39,900	28,748	25.3	44.9	45,900
CHEMISTS	20,533	24.8	51.8	32,900	22,260	22.5	53.1	39,900	22,525	19.9	54.5	45,600
PHYSICISTS/ASTRONOMERS	4,456	5.4	21.7	33,900	5,149	5.2	24.3	39,900	6,223	5.5	27.4	48,300
MATHEMATICAL SCIENTISTS	1,469	1.8	9.6	31,500	1,616	1.6	10.4	37,000	2,027	1.8	12.4	42,700
MATHEMATICIANS	1,177	1.4	9.2	31,400	1,154	1.2	8.9	36,700	1,512	1.3	11.1	43,600
STATISTICIANS	292	.4	12.1	**	462	.5	18.2	37,700	515	.5	18.5	40,000
COMPUTER/INFORMATION SPEC	3,669	4.4	54.9	29,700	5,228	5.3	57.7	36,300	6,819	6.0	56.1	42,700
ENVIRONMENTAL SCIENTISTS	4,246	5.1	29.1	34,000	4,705	4.7	29.6	40,700	5,154	4.5	31.3	48,500
EARTH SCIENTISTS	3,760	4.5	33.9	34,100	4,130	4.2	34.4	42,400	4,596	4.1	36.7	49,200
OCEANOGRAPHERS	222	.3	13.4	**	184	.2	10.3	**	217	.2	12.5	**
ATMOSPHERIC SCIENTISTS	264	.3	14.4	**	391	.4	18.4	38,100	341	.3	15.5	48,600
LIFE SCIENTISTS	11,145	13.5	14.1	33,000	13,123	13.2	15.5	39,300	16,444	14.5	17.7	43,700
BIOLOGICAL SCIENTISTS	4,298	5.2	[illegible]	32,700	5,302	5.3	10.7	36,600	7,730	6.8	14.0	41,800
AGRICULTURAL SCIENTISTS	3,062	3.7	23.9	29,500	3,097	3.1	22.9	35,500	3,583	3.2	24.6	40,100
MEDICAL SCIENTISTS	[illegible]	4.6	18.5	37,600	4,724	4.8	21.7	45,700	5,131	4.5	22.2	50,700
PSYCHOLOGISTS	7,077	8.5	18.7	38,100	10,122	10.2	21.6	40,300	13,020	11.5	27.9	48,000
SOCIAL SCIENTISTS	[illegible]	4.5	7.4	33,000	5,135	5.2	9.2	40,000	6,751	5.9	11.4	45,400
ECONOMISTS	1,890	2.3	13.5	37,100	2,573	2.6	16.1	44,000	2,779	2.4	16.4	52,100
SOCIOLOGISTS/ANTHRO	290	.3	2.8	**	478	.5	4.3	28,300	801	.7	6.6	36,300
OTHER SOCIAL SCIENTISTS	1,566	1.9	6.0	30,100	2,084	2.1	7.3	[illegible]	3,171	2.8	10.5	35,600
ENGINEERS	26,517	32.0	52.7	35,000	31,788	32.1	55.7	41,300	34,500	30.4	56.1	49,900
AERO/ASTRO ENGINEERS	907	1.1	38.4	32,300	1,127	1.1	44.7	40,400	1,928	1.7	52.3	47,700
CHEMICAL ENGINEERS	4,540	5.5	73.6	37,200	[illegible]	5.4	74.8	43,700	4,788	4.2	68.5	52,400
CIVIL ENGINEERS	1,822	2.2	35.3	30,700	2,555	2.6	42.0	40,600	1,895	1.7	35.6	47,600
ELEC./ELECTRON. ENGINEERS	4,687	5.7	54.5	36,300	6,187	6.2	58.2	44,000	7,615	6.7	60.0	51,200
MECHANICAL ENGINEERS	2,419	2.9	46.1	31,500	2,645	2.7	49.3	40,200	2,596	2.3	45.9	48,100
NUCLEAR ENGINEERS	944	1.1	41.3	32,900	1,057	1.1	51.3	40,000	1,380	1.2	59.3	46,200
OTHER ENGINEERS	11,198	13.5	54.6	34,700	12,875	13.0	55.4	40,500	14,298	12.6	57.5	48,700
SEX												
MEN	78,250	94.4	27.9	34,100	91,912	92.7	30.3	40,500	103,272	91.0	32.2	47,900
WOMEN	4,608	5.6	13.8	27,600	7,214	7.3	17.6	31,600	10,191	9.0	20.9	38,900
RACE												
WHITE	72,561	87.6	25.5	34,800	85,718	86.5	[illegible]	[illegible]	97,673	86.1	29.7	48,000
BLACK	373	.5	11.6	27,500	577	.6	13.7	[illegible]	675	.6	13.6	[illegible]
ASIAN/PACIFIC ISLANDER	9,169	11.1	40.1	30,400	11,890	12.0	43.5	36,400	13,431	11.8	45.2	44,900
AM. INDIAN/ALSKN NATIVE	46	.1	11.6	**	54	.1	13.3	**	69	.1	16.5	**
OTHER	11	*	9.2	**	47	*	22.1	**	76	.1	37.6	**
NO REPORT	698	.8	22.2	33,400	840	.8	26.1	38,800	1,539	1.4	27.7	39,800
ETHNICITY												
HISPANIC	932	1.1	22.9	31,900	1,252	[illegible]	26.1	38,800	1,497	1.3	27.9	47,200
NONHISPANIC	72,057	87.0	26.6	33,800	89,406	90.2	29.0	40,200	97,974	86.3	30.9	47,200
NO REPORT	9,869	11.9	25.2	33,800	8,468	8.5	27.4	41,000	13,992	12.3	29.6	45,200
AGE												
UNDER 30	1,784	2.2	23.8	25,000	2,301	2.3	27.9	31,700	2,037	1.8	31.5	36,400
30-34	14,324	17.3	27.1	26,900	15,644	15.8	30.5	33,300	16,432	14.5	34.1	38,700
35-39	21,570	26.0	28.5	31,900	24,155	24.4	31.3	38,300	25,491	22.5	33.6	44,100
40-44	14,858	17.9	27.3	35,500	20,064	20.2	29.8	41,500	26,059	23.0	32.5	50,100
45-49	10,087	12.2	25.1	37,800	12,673	12.8	28.7	45,300	15,900	14.0	30.7	50,900
50-54	7,722	9.3	23.3	40,900	9,200	9.3	25.1	49,100	10,656	9.4	26.8	53,100
55-59	6,638	8.0	24.9	40,900	7,482	7.5	25.0	50,100	[illegible]	6.6	23.4	55,800
60-64	3,704	4.5	23.9	40,900	4,761	4.8	25.3	49,000	[illegible]	5.4	27.3	53,800
65 & OVER	2,104	2.5	25.8	40,800	2,846	2.9	27.6	50,300	[illegible]	2.8	26.5	60,300
NO REPORT	67	.1	45.9	**	0	*	*	**	6	.1	26.1	**
TYPE OF EMPLOYMENT												
SCIENCE/ENGINEERING	75,178	90.7	26.1	33,500	88,751	89.5	28.2	40,200	98,407	86.7	30.1	46,700
OTHER/UNKNOWN FIELD	7,680	9.3	29.5	36,700	10,375	10.5	35.3	42,700	15,056	13.3	35.9	50,400
PRIMARY WORK ACTIVITY												
RESEARCH AND DEVELOPMENT	30,796	37.2	30.9	30,900	43,610	44.0	36.3	37,000	46,525	41.0	37.3	43,600
BASIC RESEARCH	4,713	5.7	9.8	29,600	6,342	6.4	11.5	36,900	6,731	5.9	11.8	42,100
APPLIED RESEARCH	14,320	17.3	38.9	31,200	21,835	22.0	46.9	37,400	23,463	20.7	49.5	44,100
DEVELOPMENT/DESIGN	11,763	14.2	78.4	31,100	15,433	15.6	84.1	36,700	16,331	14.4	90.5	[illegible]
MANAGEMENT/ADMINISTRATION+	27,887	33.7	38.6	37,300	24,630	24.8	40.7	47,800	25,528	22.5	41.3	55,900
OF R&D	23,771	28.7	55.2	36,800	18,543	18.7	56.7	46,600	20,066	17.7	63.9	55,600
OF OTHER	4,116	5.0	14.1	41,300	6,087	6.1	21.9	[illegible]	5,462	4.8	18.0	60,000
TEACHING	190	.2	.2	**	495	.5	.5	40,000	1,301	1.1	1.2	41,700
CONSULTING	6,335	7.6	70.3	32,600	9,580	9.7	79.4	40,400	10,673	9.4	83.7	48,300
SALES/PROF. SERVICES	9,769	11.8	46.2	35,900	12,060	12.2	46.8	40,500	[illegible]	13.7	52.3	48,400
OTHER	6,800	8.2	43.4	32,600	7,591	7.7	46.1	38,000	12,303	10.8	50.9	44,500
NO REPORT	1,081	1.3	25.8	30,800	1,160	1.2	29.4	37,700	1,552	1.4	20.0	50,000

* LESS THAN .[illegible] PERCENT.
** NO MEDIAN COMPUTED FOR GROUPS WITH FEWER THAN 20 INDIVIDUALS REPORTING SALARY.
+ THE CLASSIFICATION OF "MANAGEMENT/ADMINISTRATION" ACTIVITIES CHANGED IN 1979. SEE TECHNICAL NOTES, "PRIMARY WORK ACTIVITY," P. 4 FOR EXPLANATION.
NOTE: PERCENTS MAY NOT ADD TO 100 BECAUSE OF ROUNDING. MEDIAN SALARY COMPUTED FOR FULL-TIME EMPLOYED CIVILIANS ONLY.
SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE 5. SELECTED CHARACTERISTICS OF DOCTORAL SCIENTISTS AND ENGINEERS EMPLOYED BY THE FEDERAL GOVERNMENT

CHARACTERISTICS	1973 NUMBER	1973 PERCENT	1973 % OF TOTAL EMPLD	1973 MEDIAN ANNUAL SALARY	1975 NUMBER	1975 PERCENT	1975 % OF TOTAL EMPLD	1975 MEDIAN ANNUAL SALARY	1977 NUMBER	1977 PERCENT	1977 % OF TOTAL EMPLD	1977 MEDIAN ANNUAL SALARY
TOTAL	18,205	100.0	8.3	23,500	18,996	100.0	7.4	[illegible]	21,389	100.0	7.5	29,700
FIELD												
SCIENTISTS	15,475	85.0	8.4	23,500	15,967	84.1	7.5	26,200	17,870	83.5	7.4	29,500
PHYSICAL SCIENTISTS	4,104	22.5	8.5	23,400	[illegible]	19.7	6.9	26,000	3,945	18.4	[illegible]	29,700
CHEMISTS	1,645	[illegible]	5.3	23,700	1,684	8.9	4.7	26,300	1,814	[illegible]	[illegible]	29,100
PHYSICISTS/ASTRONOMERS	2,459	13.5	13.8	23,300	2,061	10.8	11.0	25,700	2,131	10.0	10.6	30,100
MATHEMATICAL SCIENTISTS	483	2.7	4.0	23,200	556	2.9	4.1	27,600	604	2.8	4.1	29,300
MATHEMATICIANS	351	1.9	3.3	22,800	372	2.0	3.1	26,000	449	2.1	3.5	29,400
STATISTICIANS	132	.7	9.0	25,000	184	1.0	10.5	30,100	155	.7	8.8	**
COMPUTER/INFORMATION SPEC	127	.7	4.7	22,300	194	1.0	5.5	24,900	251	1.2	4.4	30,500
ENVIRONMENTAL SCIENTISTS	1,961	10.8	19.0	23,800	2,201	11.6	18.2	27,500	2,417	11.3	18.6	30,700
EARTH SCIENTISTS	1,541	8.5	18.0	24,100	1,548	8.1	16.3	27,600	1,628	7.6	16.8	30,700
OCEANOGRAPHERS	196	1.1	17.3	22,400	239	1.3	18.7	28,500	287	1.3	18.4	28,300
ATMOSPHERIC SCIENTISTS	224	1.2	35.1	23,400	414	2.2	31.2	27,200	502	2.3	29.1	31,300
LIFE SCIENTISTS	5,847	32.1	10.3	22,700	5,942	31.3	9.4	25,300	6,372	29.8	9.0	28,400
BIOLOGICAL SCIENTISTS	3,439	18.9	9.3	22,400	3,437	18.1	8.8	[illegible]	3,367	15.7	8.0	[illegible]
AGRICULTURAL SCIENTISTS	1,561	8.6	17.0	22,200	1,696	8.9	[illegible]	24,800	2,076	9.7	17.1	[illegible]
MEDICAL SCIENTISTS	847	4.7	7.9	25,900	809	4.3	6.1	28,800	929	4.3	5.7	32,500
PSYCHOLOGISTS	1,237	6.8	5.8	23,800	970	5.1	3.2	26,800	1,220	5.7	3.6	30,500
SOCIAL SCIENTISTS	1,716	9.4	5.8	27,200	2,359	12.4	6.5	28,800	3,061	14.3	6.8	30,900
ECONOMISTS	917	5.0	9.5	26,100	1,275	6.7	10.8	28,000	1,370	6.4	10.6	31,200
SOCIOLOGISTS/ANTHRO	64	.4	1.0	**	155	.8	2.0	**	132	.6	1.4	**
OTHER SOCIAL SCIENTISTS	735	4.0	5.6	29,000	929	4.9	5.6	30,800	1,559	7.3	6.9	31,300
ENGINEERS	2,730	15.0	7.6	23,400	3,029	15.9	7.1	26,700	3,519	16.5	7.8	30,000
AERO/ASTRO ENGINEERS	318	1.7	19.0	23,600	430	2.3	21.3	24,900	381	1.8	19.2	28,600
CHEMICAL ENGINEERS	73	.4	1.6	**	110	.6	2.0	**	210	1.0	3.7	**
CIVIL ENGINEERS	210	1.2	6.8	22,200	229	1.2	6.1	23,400	279	1.3	6.9	29,000
ELEC./ELECTRON. ENGINEERS	482	2.6	6.8	23,600	505	2.7	5.9	23,500	620	2.9	7.5	27,300
MECHANICAL ENGINEERS	164	.9	5.0	**	236	1.2	5.9	26,400	319	1.5	6.9	27,800
NUCLEAR ENGINEERS	174	1.0	13.8	22,500	117	.6	7.0	**	150	.7	8.5	**
OTHER ENGINEERS	1,309	7.2	8.7	23,800	1,402	7.4	8.2	29,100	1,560	7.3	8.3	30,500
SEX												
MEN	17,229	94.6	8.5	23,500	17,963	94.6	7.7	26,400	20,116	94.0	7.8	29,800
WOMEN	976	5.4	5.8	22,000	1,033	5.4	4.7	24,700	1,273	6.0	4.6	26,600
RACE												
WHITE	17,154	94.2	8.5	23,500	17,638	92.9	7.6	26,300	19,754	92.4	7.7	29,700
BLACK	197	1.1	[illegible]	22,700	216	1.1	8.6	25,900	249	1.2	9.2	29,700
ASIAN/PACIFIC ISLANDER	517	2.8	5.0	22,900	650	3.4	4.8	25,400	829	3.9	5.1	26,500
AM. INDIAN/ALSKN NATIVE	0	*	*	**	4	*	1.9	**	0	*	*	**
OTHER	10	.1	5.1	**	14	.1	5.8	**	14	.1	8.0	**
NO REPORT	327	1.8	6.1	24,700	474	2.5	6.9	28,500	543	2.5	7.1	31,100
ETHNICITY												
HISPANIC	138	.8	8.8	22,700	172	.9	8.6	25,500	155	.7	5.9	30,000
NONHISPANIC	8,039	44.2	9.6	23,500	8,547	45.0	8.3	26,000	11,294	52.8	7.9	28,600
NO REPORT	10,028	55.1	7.4	23,500	10,277	54.1	6.8	26,500	9,940	46.5	7.1	30,500
AGE												
UNDER 30	639	3.5	6.6	17,300	549	2.9	5.8	19,200	311	1.5	3.7	20,700
30-34	3,617	19.9	7.3	19,000	3,519	18.5	6.4	21,300	3,668	17.1	6.8	22,900
35-39	3,216	17.7	7.6	21,600	3,927	20.7	7.3	24,300	4,747	22.2	7.1	26,500
40-44	2,955	16.2	8.4	23,900	3,210	16.9	[illegible]	26,700	3,776	17.7	8.3	29,600
45-49	2,773	15.2	9.3	26,600	2,781	14.6	[illegible]	29,500	3,200	15.0	[illegible]	32,800
50-54	2,278	12.5	9.5	27,300	2,256	11.9	7.9	32,000	2,651	12.4	8.5	35,500
55-59	1,572	8.6	10.1	29,600	1,467	7.7	8.0	33,000	1,745	8.2	7.7	37,900
60-64	725	4.0	8.1	30,800	900	4.7	8.0	34,400	926	4.3	7.0	37,300
65 & OVER	430	2.4	8.8	31,200	375	2.0	6.8	34,300	363	1.7	6.0	39,000
NO REPORT	0	*	*	**	12	.1	6.2	**	2	*	.9	**
TYPE OF EMPLOYMENT												
SCIENCE/ENGINEERING	17,378	95.5	8.4	23,300	18,409	96.9	7.7	26,200	20,430	95.5	7.8	29,500
OTHER/UNKNOWN FIELD	827	4.5	5.9	29,000	587	3.1	3.7	32,600	959	4.5	4.1	35,800
PRIMARY WORK ACTIVITY												
RESEARCH AND DEVELOPMENT	10,012	55.0	14.0	21,600	10,386	54.7	12.6	24,500	10,854	50.7	11.6	27,100
BASIC RESEARCH	4,737	26.0	13.8	22,100	4,671	24.6	12.2	24,800	4,721	22.1	10.8	27,700
APPLIED RESEARCH	4,804	26.4	16.7	21,400	5,056	26.6	15.4	24,400	5,220	24.4	14.3	26,900
DEVELOPMENT/DESIGN	471	2.6	5.5	[illegible]	659	3.5	5.8	22,700	913	4.3	6.8	26,000
MANAGEMENT/ADMINISTRATION+	6,196	34.0	13.4	28,800	6,122	32.2	11.8	32,200	7,685	35.9	12.7	34,600
OF R&D	4,498	24.7	17.2	28,900	4,708	24.8	16.4	31,900	5,430	25.4	17.6	34,700
OF OTHER	1,698	9.3	8.5	28,100	1,414	7.4	6.1	32,900	2,255	10.5	7.5	34,300
TEACHING	248	1.4	.3	25,700	142	.7	.2	**	150	.7	.2	**
CONSULTING	167	.9	4.1	25,200	255	1.3	4.6	29,000	277	1.3	4.5	27,200
SALES/PROF. SERVICES	548	3.0	6.8	21,500	327	1.7	2.8	24,000	345	1.6	2.3	29,800
OTHER	821	4.5	11.8	22,300	1,227	6.5	16.4	23,200	1,854	8.7	14.4	25,900
NO REPORT	213	1.2	5.8	26,600	537	2.8	8.8	25,400	224	1.0	3.8	30,700

* LESS THAN .05 PERCENT.

** NO MEDIAN COMPUTED FOR GROUPS WITH FEWER THAN 20 INDIVIDUALS REPORTING SALARY.

+ THE CLASSIFICATION OF "MANAGEMENT/ADMINISTRATION" ACTIVITIES CHANGED IN 1979. SEE TECHNICAL NOTES, "PRIMARY WORK ACTIVITY," P. 4 FOR EXPLANATION.

NOTE: PERCENTS MAY NOT ADD TO 100 BECAUSE OF ROUNDING. MEDIAN SALARY COMPUTED FOR FULL-TIME EMPLOYED CIVILIANS ONLY.

TABLE 5. SELECTED CHARACTERISTICS OF DOCTORAL SCIENTISTS AND ENGINEERS EMPLOYED BY THE FEDERAL GOVERNMENT
CONTINUED

CHARACTERISTICS	1979				1981				1983			
	NUMBER	PERCENT	% OF TOTAL EMPLD	MEDIAN ANNUAL SALARY	NUMBER	PERCENT	% OF TOTAL EMPLD	MEDIAN ANNUAL SALARY	NUMBER	PERCENT	% OF TOTAL EMPLD	MEDIAN ANNUAL SALARY
TOTAL	23,946	100.0	7.6	33,400	25,124	100.0	7.3	40,300	25,793	100.0	7.0	44,700
FIELD												
SCIENTISTS	20,375	85.1	7.7	[illegible]	21,321	84.9	7.4	39,800	21,950	85.1	7.1	44,300
PHYSICAL SCIENTISTS	4,598	19.2	7.6	[illegible]	4,342	17.3	6.9	40,100	4,307	16.7	6.7	44,300
CHEMISTS	2,117	8.8	5.3	[illegible]	2,132	8.5	5.1	39,100	2,054	[illegible]	5.0	42,900
PHYSICISTS/ASTRONOMERS	2,481	10.4	12.1	33,300	[illegible]	8.8	10.4	42,200	2,253	[illegible]	9.9	45,700
MATHEMATICAL SCIENTISTS	817	3.4	5.4	36,300	852	3.4	5.5	40,200	790	[illegible]	4.8	45,500
MATHEMATICIANS	575	2.4	4.5	38,500	553	2.2	4.2	40,800	499	1.9	3.7	[illegible]
STATISTICIANS	242	1.0	10.1	**	299	1.2	11.7	39,200	291	1.1	10.4	46,700
COMPUTER/INFORMATION SPEC	336	1.4	5.0	**	355	1.4	3.9	38,700	490	1.9	4.0	45,900
ENVIRONMENTAL SCIENTISTS	2,716	11.3	18.6	35,300	3,075	12.2	19.3	40,700	3,102	12.0	18.8	45,900
EARTH SCIENTISTS	1,829	7.6	16.5	36,000	2,066	8.2	17.2	40,900	2,176	8.4	17.4	46,100
OCEANOGRAPHERS	387	1.6	23.3	32,400	367	1.5	20.5	40,200	274	1.1	15.7	41,500
ATMOSPHERIC SCIENTISTS	500	2.1	27.3	35,400	642	[illegible]	30.2	41,200	652	2.5	29.6	48,000
LIFE SCIENTISTS	7,167	29.9	9.1	31,800	7,225	28.8	8.5	[illegible]	7,771	30.1	8.4	42,700
BIOLOGICAL SCIENTISTS	3,935	16.4	8.6	30,900	[illegible]	16.5	8.4	[illegible]	4,622	17.9	8.4	42,000
AGRICULTURAL SCIENTISTS	2,116	8.8	16.5	32,400	2,053	8.2	15.2	[illegible]	2,036	7.9	14.0	43,400
MEDICAL SCIENTISTS	1,116	4.7	5.5	35,600	1,023	4.1	4.7	41,100	1,113	4.3	4.8	49,000
PSYCHOLOGISTS	1,080	4.5	2.9	34,700	1,211	4.8	2.8	39,000	1,191	4.6	2.6	43,800
SOCIAL SCIENTISTS	3,661	15.3	7.3	34,700	4,261	17.0	7.7	43,900	4,299	16.7	7.2	45,600
ECONOMISTS	1,618	6.8	11.6	[illegible]	1,649	6.6	10.3	45,600	1,692	6.6	10.0	48,900
SOCIOLOGISTS/ANTHRO.	121	.5	[illegible]	**	[illegible]	1.2	2.7	**	121	.5	1.0	**
OTHER SOCIAL SCIENTISTS.	1,922	8.0	7.3	32,700	2,311	9.2	8.1	44,100	2,486	9.6	8.2	44,700
ENGINEERS	3,571	14.9	7.1	35,200	3,803	15.1	6.7	42,600	[illegible]	14.9	6.2	46,500
AERO/ASTRO ENGINEERS	[illegible]	1.7	17.2	**	425	1.7	16.9	[illegible]	511	2.0	13.9	49,300
CHEMICAL ENGINEERS	[illegible]	1.1	4.2	**	258	1.0	3.6	**	174	.7	2.5	**
CIVIL ENGINEERS	249	1.0	4.8	**	145	.6	2.4	**	79	.3	1.5	**
ELEC./ELECTRON. ENGINEERS	719	3.0	[illegible]	33,200	524	2.1	4.9	40,600	776	3.0	6.1	45,500
MECHANICAL ENGINEERS	338	1.4	6.4	**	322	1.3	6.0	**	353	1.4	6.2	**
NUCLEAR ENGINEERS	212	.9	9.3	**	72	.3	[illegible]	**	148	.6	6.4	**
OTHER ENGINEERS	1,386	5.8	6.8	38,300	2,057	8.2	8.9	[illegible]	1,802	7.0	7.2	45,900
SEX												
MEN	22,321	93.2	7.9	33,800	23,128	92.1	7.6	40,800	23,338	90.5	7.3	45,300
WOMEN	1,625	6.8	4.9	28,100	1,996	7.9	4.9	33,500	2,455	9.5	5.0	37,500
RACE												
WHITE	22,310	93.2	7.8	33,600	23,285	92.7	7.5	40,500	23,615	91.6	7.2	44,900
BLACK	312	1.3	9.7	30,500	281	1.1	6.7	36,800	308	1.2	6.2	43,300
ASIAN/PACIFIC ISLANDER	1,092	4.6	4.8	30,200	1,318	5.2	4.8	37,700	[illegible]	5.4	[illegible]	[illegible]
AM. INDIAN/ALSKN NATIVE	30	.1	7.6	**	38	.2	9.4	**	13	.1	[illegible]	**
OTHER	31	.1	26.1	**	24	.1	11.3	**	20	.1	9.9	**
NO REPORT	171	.7	5.4	**	178	.7	5.5	**	455	[illegible]	8.2	**
ETHNICITY												
HISPANIC	397	1.7	9.8	36,000	432	1.7	9.0	34,900	392	1.5	7.3	47,000
NONHISPANIC	20,947	[illegible]	7.7	33,200	22,774	90.6	7.4	40,200	22,414	86.9	7.1	44,700
NO REPORT	2,602	10.9	6.7	34,700	1,918	7.6	6.2	42,500	2,987	11.6	6.3	44,600
AGE												
UNDER 30	206	.8	2.7	**	314	1.2	3.8	28,600	161	.6	2.5	**
30-34	3,219	13.4	[illegible]	26,000	2,301	9.2	4.5	32,000	2,102	8.1	[illegible]	32,300
35-39	6,441	26.9	[illegible]	31,200	6,518	25.9	8.5	35,900	5,544	21.5	7.3	38,700
40-44	4,733	19.8	8.7	32,400	5,095	20.3	7.6	40,000	6,247	24.2	7.8	44,200
45-49	3,030	12.7	[illegible]	37,900	3,475	13.8	7.9	42,800	4,145	16.1	8.0	46,400
50-54	2,787	11.6	[illegible]	[illegible]	2,946	[illegible]	8.0	45,900	2,665	10.3	6.7	51,900
55-59	1,970	8.2	7.4	42,800	2,537	[illegible]	8.5	49,800	2,594	[illegible]	8.1	51,100
60-64	1,015	4.2	6.5	[illegible]	1,272	5.1	6.8	50,100	1,506	[illegible]	6.7	54,800
65 & OVER	551	2.3	6.8	[illegible]	666	2.7	6.5	50,100	[illegible]	3.2	6.8	57,600
NO REPORT	0	*	*	**	0	*	*	**	0	*	*	**
TYPE OF EMPLOYMENT												
SCIENCE/ENGINEERING	22,691	94.8	[illegible]	33,300	23,796	94.7	7.6	40,200	23,807	92.3	7.3	44,700
OTHER/[illegible] FIELD	1,255	5.2	4.8	39,700	1,328	5.3	4.5	48,100	1,986	7.7	4.7	45,400
PRIMARY WORK ACTIVITY												
RESEARCH AND DEVELOPMENT	12,139	[illegible]	12.2	31,300	13,692	54.5	11.4	37,700	13,878	53.8	11.1	41,700
BASIC RESEARCH	5,353	[illegible]	11.2	31,800	6,084	24.2	11.0	38,700	6,388	[illegible]	11.2	40,900
APPLIED RESEARCH	5,735	[illegible]	15.6	30,800	6,835	27.2	14.7	37,200	6,490	25.2	13.7	42,400
DEVELOPMENT/DESIGN	1,051	4.4	7.0	32,600	773	3.1	4.2	36,300	1,000	3.9	4.9	41,200
MANAGEMENT/ADMINISTRATION+	8,378	35.0	11.6	38,200	7,788	31.0	12.9	48,600	7,160	27.8	11.6	52,500
OF R&D	6,676	27.9	15.5	38,100	5,856	23.3	17.9	49,500	5,400	20.9	17.2	53,200
OF OTHER	1,702	7.1	5.8	38,400	1,932	7.7	6.9	44,600	1,760	6.8	5.8	46,900
TEACHING	185	.8	.2	**	106	.4	.1	**	235	.9	.2	[illegible]
CONSULTING	336	1.4	3.7	33,800	373	1.5	3.1	37,900	383	1.5	3.0	40,500
SALES/PROF. SERVICES	366	1.5	1.7	29,900	775	3.1	3.0	39,800	805	3.1	2.7	40,600
OTHER	2,153	9.0	13.7	32,800	2,289	9.1	13.9	38,700	2,941	11.4	12.2	40,600
NO REPORT	389	1.6	9.3	**	101	.4	2.6	**	391	1.5	5.0	**

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SOURCE: NATIONAL SCIENCE FOUNDATION.

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TABLE 5. SELECTED CHARACTERISTICS OF EMPLOYED WOMEN DOCTORAL SCIENTISTS AND ENGINEERS IN THE U.S.

	1973				1975				1977			
CHARACTERISTICS	NUMBER	PERCENT	% OF TOTAL EMPLD	MEDIAN ANNUAL SALARY	NUMBER	PERCENT	% OF TOTAL EMPLD	MEDIAN ANNUAL SALARY	NUMBER	PERCENT	% OF TOTAL EMPLD	MEDIAN ANNUAL SALARY
TOTAL	16,925	100.0	7.7	17,400	22,063	100.0	8.6	19,100	27,590	100.0	9.7	20,700
FIELD												
SCIENTISTS	16,786	99.2	9.1	17,300	21,830	98.9	10.2	19,000	27,309	99.0	11.4	20,700
PHYSICAL SCIENTISTS	1,911	11.3	3.9	17,300	2,539	11.5	4.6	19,100	2,937	10.6	5.1	21,200
CHEMISTS	1,477	8.7	4.8	17,200	2,065	9.4	5.8	19,100	2,384	8.6	6.4	20,800
PHYSICISTS/ASTRONOMERS	434	2.6	2.4	17,600	474	2.1	2.5	19,400	553	2.0	2.7	23,100
MATHEMATICAL SCIENTISTS	777	4.6	6.4	16,600	906	4.1	6.7	18,400	1,049	3.8	7.2	19,900
MATHEMATICIANS	703	4.2	6.6	16,300	821	3.7	6.9	18,200	932	3.4	[illegible]	19,900
STATISTICIANS	74	.4	5.0	18,900	85	.4	4.9	21,700	117	.4	6.6	20,500
COMPUTER/INFORMATION SPEC	88	.5	3.2	17,400	148	.7	4.2	18,000	233	.8	4.0	20,800
ENVIRONMENTAL SCIENTISTS	262	1.5	2.5	16,700	325	1.5	2.7	19,100	441	1.6	3.4	19,900
EARTH SCIENTISTS	205	1.2	2.4	16,200	242	1.1	2.5	18,200	295	1.1	3.0	20,200
OCEANOGRAPHERS	37	.2	3.3	**	51	.2	4.0	**	75	.3	4.8	19,200
ATMOSPHERIC SCIENTISTS	20	.1	3.1	**	32	.1	2.4	**	71	.3	4.1	19,200
LIFE SCIENTISTS	6,109	36.1	10.8	17,000	7,533	34.1	[illegible]	19,000	9,100	33.0	12.9	21,100
BIOLOGICAL SCIENTISTS	4,883	28.9	13.3	16,800	5,780	26.2	14.8	19,500	6,670	24.2	15.9	20,500
AGRICULTURAL SCIENTISTS	118	.7	1.3	16,300	148	.7	1.3	[illegible]	232	.8	1.9	20,500
MEDICAL SCIENTISTS	1,108	6.5	10.4	18,300	1,605	7.3	12.1	20,600	2,198	8.0	13.4	23,000
PSYCHOLOGISTS	4,770	28.2	19.2	18,000	6,305	28.6	21.0	19,600	7,597	27.5	22.6	20,600
SOCIAL SCIENTISTS	2,869	17.0	9.8	17,300	4,074	18.5	11.2	18,700	5,952	21.6	13.3	20,300
ECONOMISTS	489	2.9	5.1	19,300	635	2.9	5.4	21,000	817	3.0	6.3	23,400
SOCIOLOGISTS/ANTHRO	1,220	7.2	18.7	16,600	1,656	7.5	20.9	18,400	2,277	8.3	24.0	19,700
OTHER SOCIAL SCIENTISTS	1,160	6.9	[illegible]	17,100	1,783	8.1	10.8	18,200	2,858	10.4	12.7	20,000
ENGINEERS	139	.8	.4	[illegible]	233	1.1	.5	21,200	281	1.0	.6	22,900
AERO/ASTRO ENGINEERS	13	.1	.8	**	16	.1	.8	**	20	.1	1.0	**
CHEMICAL ENGINEERS	8	*	.2	**	23	.1	.4	**	28	.1	.5	**
CIVIL ENGINEERS	7	*	.2	**	5	*	.1	**	15	.1	.4	**
ELEC./ELECTRON. ENGINEERS	26	.2	.4	**	45	.2	.5	**	38	.1	.5	**
MECHANICAL ENGINEERS	6	*	.2	**	9	*	.2	**	19	.1	.4	**
NUCLEAR ENGINEERS	6	*	.5	**	10	*	.6	**	9	*	.5	**
OTHER ENGINEERS	73	.4	.5	18,900	125	.6	.7	22,200	152	.6	.8	22,700
RACE												
WHITE	15,679	92.6	7.8	17,400	20,074	91.0	8.6	19,000	25,166	91.2	9.8	20,700
BLACK	247	1.5	12.1	18,200	422	1.9	16.8	20,400	526	1.9	19.4	22,400
ASIAN/PACIFIC ISLANDER	710	4.2	6.9	16,500	1,134	5.1	8.4	18,900	1,407	5.1	8.7	20,500
AM. INDIAN/ALSKN NATIVE	7	*	5.0	**	11	*	5.2	**	22	.1	9.3	**
OTHER	17	.1	8.7	**	37	.2	15.2	**	20	.1	11.4	**
NO REPORT	265	1.6	4.9	17,800	385	1.7	5.6	20,200	449	1.6	5.8	22,100
ETHNICITY												
HISPANIC	147	.9	9.4	16,400	205	.9	10.2	19,800	279	1.0	10.6	20,200
NONHISPANIC	10,963	64.8	13.2	17,400	14,749	66.8	14.3	19,100	20,861	75.6	14.7	20,600
NO REPORT	5,815	34.4	4.3	17,300	7,109	32.2	4.7	19,000	6,450	23.4	4.6	21,500
AGE												
UNDER 30	1,033	6.1	10.7	14,400	1,535	7.0	16.1	15,900	1,649	6.0	19.4	17,500
30-34	3,535	20.9	7.1	14,900	4,974	22.5	9.0	16,800	6,601	23.9	12.3	18,400
35-39	2,759	16.3	6.6	16,600	4,080	18.5	7.6	18,300	5,648	20.5	8.5	20,100
40-44	2,443	14.4	6.9	17,900	2,810	12.7	7.0	20,300	3,473	12.6	7.7	21,700
45-49	2,481	14.7	8.3	18,700	[illegible]	13.1	8.6	21,500	3,329	12.1	8.8	23,000
50-54	1,845	10.9	7.7	19,500	2,422	11.0	8.4	22,400	2,935	10.6	9.4	24,800
55-59	1,382	8.2	8.9	20,200	1,454	6.6	7.9	21,700	1,842	6.7	8.1	24,400
60-64	848	5.0	9.4	20,600	1,160	5.3	10.3	22,600	1,302	4.7	9.9	25,000
65 & OVER	574	3.4	11.8	19,800	714	3.2	13.0	22,300	750	2.7	12.4	25,100
NO REPORT	23	.1	23.0	**	27	.1	13.9	**	61	.2	28.6	**
TYPE OF EMPLOYMENT												
SCIENCE/ENGINEERING	15,568	92.0	7.5	17,300	20,503	92.9	8.5	19,000	25,057	90.8	9.6	20,700
OTHER/UNKNOWN FIELD	1,357	8.0	9.7	18,200	1,560	7.1	9.9	19,600	2,533	9.2	11.0	20,800
SECTOR OF EMPLOYMENT												
BUSINESS/INDUSTRY	1,363	8.1	2.6	20,200	2,139	9.7	3.3	22,200	2,985	10.8	4.2	24,400
EDUCATIONAL INSTITUTIONS	12,126	71.6	9.4	16,800	15,488	70.2	10.4	18,500	18,860	68.4	11.5	20,100
4-YEAR COLLEGES/UNIV	11,098	65.6	8.9	16,700	14,198	64.4	9.9	18,400	17,234	62.5	11.0	20,000
2-YEAR COLLEGES	549	3.2	18.5	16,700	701	3.2	19.7	18,700	930	3.4	20.0	19,700
ELEMENTARY/SEC. SCHOOLS	479	2.8	31.1	19,600	589	2.7	31.1	20,700	696	2.5	34.2	21,100
HOSPITALS/CLINICS	967	5.7	21.3	16,600	1,750	7.9	23.4	19,500	1,970	7.1	22.9	21,100
NONPROFIT ORGANIZATIONS	783	4.6	9.8	17,500	914	4.1	11.0	19,600	1,430	5.2	14.0	21,200
FEDERAL GOVERNMENT	976	5.8	5.4	22,000	1,033	4.7	5.4	24,700	1,273	4.6	6.0	26,600
MILITARY/COMM. CORPS	19	.1	1.0	**	39	.2	1.8	**	47	.2	2.1	**
STATE GOVERNMENT	386	2.3	12.9	18,300	393	1.8	13.0	19,800	482	1.7	12.8	19,700
OTHER GOVERNMENT	186	1.1	14.8	16,700	233	1.1	12.4	20,000	338	1.2	22.0	21,800
OTHER	74	.4	22.4	**	15	.1	18.3	**	21	.1	3.6	**
NO REPORT	45	.3	15.8	**	59	.3	18.1	**	184	.7	13.6	**
PRIMARY WORK ACTIVITY												
RESEARCH & DEVELOPMENT	4,652	27.5	6.5	17,400	5,998	27.2	7.3	19,100	7,594	27.5	8.1	21,000
BASIC RESEARCH	3,498	20.7	10.2	16,800	4,450	20.2	11.7	18,400	5,428	19.7	12.5	20,600
APPLIED RESEARCH	1,004	5.9	3.5	18,900	1,323	6.0	4.0	20,400	1,773	6.4	4.9	22,200
DEVELOPMENT/DESIGN	150	.9	1.8	17,200	225	1.0	2.0	19,300	393	1.4	2.9	20,600
MANAGEMENT/ADMINISTRATION+	1,836	10.8	4.0	20,700	2,432	11.0	4.7	23,100	3,486	12.6	5.7	25,100
OF R&D	704	4.2	2.7	20,900	893	4.0	3.1	24,700	1,247	4.5	4.1	26,500
OF OTHER	1,132	6.7	5.7	20,600	1,539	7.0	6.7	22,400	2,239	8.1	7.5	24,400
TEACHING	7,482	44.2	9.4	16,500	9,441	42.8	10.4	18,200	10,420	37.8	11.5	19,500
CONSULTING	333	2.0	8.2	18,200	398	1.8	7.2	20,700	493	1.8	8.0	22,300
SALES/PROF. SERVICES	1,647	9.7	20.4	18,100	2,353	10.7	20.2	20,000	3,245	11.8	21.3	21,200
OTHER	637	3.8	9.2	17,700	822	3.7	11.0	18,400	1,647	6.0	12.8	20,500
NO REPORT	338	2.0	9.2	17,300	619	2.8	10.2	20,600	705	2.6	12.1	20,300
FEDERAL SUPPORT STATUS												
RECEIVING SUPPORT	6,778	40.0	6.8	18,000	8,652	39.2	7.9	19,900	10,464	37.9	8.7	21,800
NOT RECEIVING SUPPORT	8,833	52.2	8.0	17,000	11,873	53.8	8.7	18,700	15,097	54.7	9.9	20,300
STATUS UNKNOWN	1,058	6.3	15.4	15,800	1,175	5.3	17.7	18,400	1,482	5.4	19.8	19,800
NO REPORT	256	1.5	9.3	17,700	363	1.6	15.9	19,500	547	2.0	12.2	19,200

* LESS THAN .05 PERCENT.
** NO MEDIAN COMPUTED FOR GROUPS WITH FEWER THAN 20 INDIVIDUALS REPORTING SALARY.
+ THE CLASSIFICATION OF "MANAGEMENT/ADMINISTRATION" ACTIVITIES CHANGED IN 1979. SEE TECHNICAL NOTES, "PRIMARY WORK ACTIVITY," P. 4 FOR EXPLANATION.
NOTE: PERCENTS MAY NOT ADD TO 100 BECAUSE OF ROUNDING. MEDIAN SALARY COMPUTED FOR FULL-TIME EMPLOYED CIVILIANS ONLY.

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TABLE 6. SELECTED CHARACTERISTICS OF EMPLOYED WOMEN DOCTORAL SCIENTISTS AND ENGINEERS IN THE U.S. CONTINUED

CHARACTERISTICS	1979 NUMBER	1979 PERCENT	1979 % OF TOTAL EMPLD	1979 MEDIAN ANNUAL SALARY	1981 NUMBER	1981 PERCENT	1981 % OF TOTAL EMPLD	1981 MEDIAN ANNUAL SALARY	1983 NUMBER	1983 PERCENT	1983 % OF TOTAL EMPLD	1983 MEDIAN ANNUAL SALARY
TOTAL	33,400	100.0	10.6	23,100	40,985	100.0	11.9	27,000	48,826	100.0	13.2	31,700
FIELD												
SCIENTISTS	32,875	98.4	12.5	23,100	40,232	98.2	14.0	26,900	47,750	97.8	15.5	31,500
PHYSICAL SCIENTISTS	3,136	9.4	5.2	24,300	3,764	9.2	6.0	29,400	4,175	8.6	6.5	35,200
CHEMISTS	2,561	7.7	6.5	24,200	3,157	7.7	7.5	29,100	3,451	7.1	8.4	34,700
PHYSICISTS/ASTRONOMERS	575	1.7	2.8	[illegible]	607	1.5	2.9	31,100	724	1.5	3.2	37,400
MATHEMATICAL SCIENTISTS	1,146	3.4	7.5	21,800	1,310	3.2	8.4	26,800	1,415	2.9	8.6	32,200
MATHEMATICIANS	978	2.9	7.6	21,800	1,034	2.5	7.9	26,700	1,118	2.3	8.2	31,600
STATISTICIANS	168	.5	7.0	21,900	276	.7	10.8	27,000	297	.6	10.6	34,400
COMPUTER/INFORMATION SPEC	366	1.1	5.5	22,800	701	1.7	7.7	28,700	1,266	2.6	18.4	33,400
ENVIRONMENTAL SCIENTISTS	607	1.8	4.2	23,600	855	2.1	5.4	29,300	914	1.9	5.6	35,300
EARTH SCIENTISTS	410	1.2	3.7	25,400	570	1.4	4.8	30,100	637	1.3	5.1	36,300
OCEANOGRAPHERS	152	.5	9.1	21,500	203	.5	11.3	28,700	187	.4	10.7	31,600
ATMOSPHERIC SCIENTISTS	45	.1	2.5	**	82	.2	3.9	[illegible]	90	.2	4.1	34,000
LIFE SCIENTISTS	11,329	33.9	14.4	23,100	13,319	32.5	15.7	27,100	16,229	33.2	17.5	31,200
BIOLOGICAL SCIENTISTS	7,875	23.6	17.3	22,200	9,004	22.0	18.1	26,300	10,626	21.8	19.2	30,800
AGRICULTURAL SCIENTISTS	290	.9	2.3	21,500	369	.9	2.7	25,700	660	1.4	4.5	29,100
MEDICAL SCIENTISTS	3,164	9.5	15.5	25,500	3,946	9.6	18.1	29,600	4,943	10.1	21.4	32,700
PSYCHOLOGISTS	9,158	27.4	24.2	23,200	11,726	28.6	27.4	26,200	13,683	28.0	29.3	30,800
SOCIAL SCIENTISTS	7,133	21.4	14.1	22,600	8,557	20.9	15.4	[illegible]	10,068	20.6	17.0	30,700
ECONOMISTS	[illegible]	3.0	7.2	26,900	1,217	3.0	7.6	[illegible]	1,429	2.9	8.4	34,600
SOCIOLOGISTS/ANTHRO.	2,550	7.6	25.0	22,100	2,946	7.2	26.8	[illegible]	3,490	7.1	28.9	29,800
OTHER SOCIAL SCIENTISTS	3,583	10.7	13.6	22,300	4,394	10.7	15.4	25,700	5,149	10.5	17.8	30,800
ENGINEERS	525	1.6	1.0	26,600	753	1.8	1.3	32,000	1,076	2.2	1.7	39,200
AERO/ASTRO ENGINEERS	24	.1	1.0	**	39	.1	1.5	**	70	.1	1.9	41,800
CHEMICAL ENGINEERS	49	.1	.8	27,500	54	.1	.8	32,600	97	.2	1.4	40,100
CIVIL ENGINEERS	56	.2	1.1	**	86	.2	1.4	28,600	72	.1	1.4	29,300
ELEC./ELECTRON. ENGINEERS	69	.2	.8	24,700	137	.3	1.3	32,000	236	.5	1.9	40,000
MECHANICAL ENGINEERS	32	.1	.6	**	40	.1	.7	**	54	.1	1.0	36,200
NUCLEAR ENGINEERS	21	.1	.9	**	18	*	.9	**	30	.1	1.3	**
OTHER ENGINEERS	274	.8	1.3	27,200	379	.9	1.6	32,700	517	1.1	2.1	39,200
RACE												
WHITE	[illegible]	90.0	10.6	23,100	36,671	89.5	11.9	26,900	43,341	88.8	13.2	31,700
BLACK	[illegible]	2.3	23.8	24,200	1,059	2.6	25.1	28,500	1,364	2.8	27.6	31,800
ASIAN/PACIFIC ISLANDER	2,190	6.6	9.6	22,900	2,927	7.1	10.7	28,000	3,423	7.0	11.5	32,900
AM. INDIAN/ALSKN NATIVE	37	.1	9.3	**	39	.1	9.6	**	49	.1	11.7	**
OTHER	43	.1	36.1	**	70	.2	32.9	**	48	.1	23.8	**
NO REPORT	289	.9	9.2	25,100	219	.5	6.8	32,400	601	1.2	10.8	28,500
ETHNICITY												
HISPANIC	393	1.2	9.7	22,500	551	1.3	11.5	26,100	697	1.4	13.0	30,800
NONHISPANIC	29,612	88.7	10.9	23,100	38,075	92.9	12.4	26,900	42,699	87.5	13.5	31,800
NO REPORT	3,395	10.2	8.7	23,600	2,359	5.8	7.6	29,900	5,430	11.1	11.5	30,800
AGE												
UNDER 30	1,464	4.4	19.5	18,700	1,762	4.3	21.4	24,100	1,438	2.9	22.2	25,900
30-34	8,459	25.3	16.0	20,600	9,343	22.8	18.2	24,100	9,613	19.7	20.0	27,700
35-39	7,451	22.3	9.9	22,400	10,191	24.9	13.2	25,700	12,531	25.7	16.5	30,600
40-44	4,754	14.2	8.7	24,600	6,502	15.9	9.6	28,400	9,376	19.2	11.7	32,500
45-49	3,388	10.1	8.4	25,500	4,127	10.1	9.4	29,100	5,182	10.6	10.0	34,500
50-54	3,173	9.5	9.6	26,700	3,502	8.5	9.5	30,800	4,186	8.6	10.5	35,300
55-59	2,318	6.9	8.7	[illegible]	2,840	6.9	9.5	33,100	3,234	6.6	10.1	37,600
60-64	1,410	4.2	9.1	29,500	1,568	3.8	8.3	33,100	1,839	3.8	8.1	39,400
65 & OVER	948	2.8	11.6	27,800	1,129	2.8	11.0	32,200	1,367	2.8	11.3	38,900
NO REPORT	35	.1	24.0	**	21	.1	100.0	**	60	.1	23.7	**
TYPE OF EMPLOYMENT												
SCIENCE/ENGINEERING	30,081	90.1	10.4	23,100	36,763	89.7	11.7	27,000	42,530	87.1	13.0	31,700
OTHER/UNKNOWN FIELD	3,319	9.9	12.7	24,000	4,222	10.3	14.4	27,300	6,296	12.9	15.0	32,200
SECTOR OF EMPLOYMENT												
BUSINESS/INDUSTRY	4,608	13.8	5.6	27,600	7,214	17.6	7.3	31,600	10,191	20.9	9.0	38,900
EDUCATIONAL INSTITUTIONS	21,922	65.6	12.6	22,300	25,835	63.0	13.8	[illegible]	29,316	60.0	15.0	30,200
4-YEAR COLLEGES/UNIV	20,090	60.1	12.0	22,200	23,727	57.9	13.2	[illegible]	26,966	55.2	14.4	30,100
2-YEAR COLLEGES	912	2.7	19.9	23,900	1,049	2.6	[illegible]	27,400	1,153	2.4	21.3	30,900
ELEMENTARY/SEC. SCHOOLS	920	2.8	37.2	24,300	1,059	2.6	[illegible]	26,200	1,197	2.5	38.9	31,200
HOSPITALS/CLINICS	1,933	5.8	19.8	22,800	2,202	5.4	22.3	26,600	2,569	[illegible]	24.6	30,900
NONPROFIT ORGANIZATIONS	1,849	5.5	14.8	23,300	2,127	5.2	16.9	[illegible]	2,344	4.8	19.7	31,900
FEDERAL GOVERNMENT	1,625	4.9	6.8	28,100	1,996	4.9	7.9	[illegible]	2,455	5.0	9.5	37,500
MILITARY/COMM. CORPS	52	.2	2.3	**	97	.2	4.7	**	59	.1	2.8	**
STATE GOVERNMENT	772	2.3	18.4	20,400	863	2.1	19.4	24,700	1,037	2.1	20.2	29,500
OTHER GOVERNMENT	392	1.2	20.2	24,000	487	1.2	23.1	25,600	644	1.3	25.0	30,300
OTHER	49	.1	5.2	**	68	.2	6.9	**	74	.2	7.4	**
NO REPORT	198	.6	14.1	**	96	.2	16.5	**	137	.3	15.6	**
PRIMARY WORK ACTIVITY												
RESEARCH & DEVELOPMENT	9,394	28.1	9.4	23,200	12,306	30.0	10.3	28,000	14,638	30.0	11.7	32,800
BASIC RESEARCH	6,402	19.2	13.4	22,200	7,982	19.5	14.5	26,400	9,146	18.7	16.0	30,800
APPLIED RESEARCH	2,450	7.3	6.7	25,100	3,547	8.7	7.6	29,700	4,250	8.7	9.0	35,300
DEVELOPMENT/DESIGN	542	1.6	3.6	24,300	777	1.9	4.2	29,900	1,242	2.5	6.1	35,700
MANAGEMENT/ADMINISTRATION+	5,099	15.3	7.1	26,400	5,055	12.3	8.4	32,500	5,233	10.7	8.5	37,800
OF R&D	2,039	6.1	4.7	27,800	1,539	3.8	4.7	35,800	1,385	2.8	4.4	41,400
OF OTHER	3,060	9.2	10.5	25,400	3,516	8.6	12.6	30,800	3,848	7.9	[illegible]	36,400
TEACHING	11,420	34.2	12.4	21,900	13,958	34.1	13.3	25,300	15,536	31.8	14.4	29,700
CONSULTING	606	1.8	6.7	25,100	1,070	2.6	8.9	28,900	1,169	2.4	9.2	35,700
SALES/PROF. SERVICES	4,401	13.2	20.8	24,500	5,770	14.1	22.4	26,500	7,955	16.3	26.7	31,300
OTHER	1,781	5.3	11.4	22,800	2,247	5.5	13.6	26,300	3,165	6.5	13.1	32,700
NO REPORT	699	2.1	16.7	23,300	579	1.4	14.7	26,900	1,130	2.3	14.6	28,400
FEDERAL SUPPORT STATUS												
RECEIVING SUPPORT	12,526	37.5	9.9	23,700	14,408	35.2	11.4	27,800	17,154	35.1	11.9	32,600
NOT RECEIVING SUPPORT	18,163	54.4	10.6	23,000	20,153	49.2	12.5	26,300	26,557	54.4	14.0	31,400
STATUS UNKNOWN	1,823	5.5	19.8	21,200	1,580	3.9	25.0	24,900	1,706	3.5	21.6	29,300
NO REPORT	888	2.7	12.1	23,000	4,844	11.8	9.7	29,300	3,409	7.0	12.5	27,200

* LESS THAN .05 PERCENT.

** NO MEDIAN COMPUTED FOR GROUPS WITH FEWER THAN 20 INDIVIDUALS REPORTING SALARY.

+ THE CLASSIFICATION OF "MANAGEMENT/ADMINISTRATION" ACTIVITIES CHANGED IN 1979. SEE TECHNICAL NOTES, "PRIMARY WORK ACTIVITY," P. 4 FOR EXPLANATION.

NOTE: PERCENTS MAY NOT ADD TO 100 BECAUSE OF ROUNDING. MEDIAN SALARY COMPUTED FOR FULL-TIME EMPLOYED CIVILIANS ONLY.

SOURCE: NATIONAL SCIENCE FOUNDATION

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section a

technical notes

survey universe

Surveys of doctoral scientists and engineers are conducted on the basis of a sample of individuals drawn from a roster of doctorate recipients. The roster is compiled from a number of sources, including the following: National Academy of Sciences/National Research Council's (NAS/NRC's) Doctorate Records File, an accumulated record of data of doctorate recipients from U.S. institutions maintained by NAS/NRC; National Science Foundation's (NSF's) National Register of Scientific and Technical Personnel, which from 1954 through 1970 collected information on highly qualified personnel in science fields; *American Men and Women in Science*, and several other sources including university and college catalogs of doctorate-granting institutions; Federal laboratories; and selected industrial organizations. The 1983 population consists of individuals who earned doctorates within the 42-year period January 1, 1930 to June 30, 1982. Included in this population are individuals who earned a doctorate in the natural or social sciences, mathematics, and engineering from U.S. institutions, as well as individuals who received research doctorates in non-S/E fields but were known to be employed as scientists or engineers. In addition, the population included individuals who had earned their doctorates at foreign institutions and were known to be working in the United States as scientists or engineers.

The 1983 Survey of Doctorate Recipients was the sixth in a biennial series. The first, conducted in 1973, included individuals who had received doctorates between January 1, 1930 and June 30, 1972. Subsequent surveys continued to account for a 42-year period by adding the two most recent graduating cohorts and eliminating the two oldest. The resulting population is slightly larger than that reported by NAS/NRC based on this survey[1] because the NSF estimates include non-S/E doctorate-holders employed as scientists and engineers and because of other differences in methods of classification. The numerical differences and a comparison of NSF and NAS/NRC field classifications are outlined in table A-1.

survey procedures

A sample of approximately 54,900 scientists and engineers was selected for the 1983 survey.[2] In drawing this sample, individuals in the file were stratified according to the following characteristics: (1) source and type of degree (U.S. S/E doctorate-holders, non-S/E doctorate-holders, and foreign doctorate-holders); (2) sex; (3) field of doctorate; (4) year of doctorate; (5) racial/ethnic identification; and (6) citizenship.

Source and type of degree—Since the roster is compiled from several sources, it was necessary for sampling purposes to treat as separate segments those individuals who received their degrees from U.S. institutions, those who held doctorates from foreign institutions, and those who held non-S/E doctorates.

Sex—The number of women S/E doctorate-holders is significantly smaller than that of men. This characteristic, therefore, was used to define a stratum to assure that women were adequately represented in the sample selected.

Field of doctorate—The major subject of an individual's doctorate was used for stratification. For individuals who received a doctorate from U.S. academic institutions, the field of doctorate was that recorded in the Doctorate Records File.

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[1] National Academy of Sciences, *Science, Engineering, and Humanities Doctorates in the United States: 1983 Profile* (Washington, D.C., 1985).

[2] Beginning in 1977 the Survey of Doctorate Recipients was expanded to include humanists. This report, however, is limited to that aspect of the survey dealing with scientists and engineers.

Table A-1. Doctoral scientists and engineers in the U.S. by NSF and NAS/NRC field classification: 1983 Survey of Doctorate Recipients

Field	NSF		NAS/NRC			
			Field of doctorate		Field of employment	
	Number	Percent	Number	Percent	Number	Percent
Total scientists/engineers	395,033	100.0	387,300	100.0	361,700	100.0
Physical scientists	69,579	17.6	[1]	[1]	[1]	[1]
Chemists	45,569	11.5	50,000	12.9	34,200	9.5
Physicists/astronomers	24,010	6.1	30,300	7.8	19,400	5.4
Mathematical scientists	17,357	4.4	19,600	5.1	13,700	3.8
Mathematicians	14,470	3.7	[1]	[1]	[1]	[1]
Statisticians	2,887	.7	[1]	[1]	[1]	[1]
Computer specialists	12,304	3.1	2,[illegible]00	.7	10,700	2.9
Environmental scientists	17,141	4.3	12,900	3.3	15,500	4.3
Earth scientists	13,077	3.3	[1]	[1]	[1]	[1]
Oceanographers	1,798	.5	[1]	[1]	[1]	[1]
Atmospheric scientists	2,266	.6	[1]	[1]	[1]	[1]
Engineers	63,786	16.1	57,500	14.9	56,000	15.5
Aeronautical/astronautical	3,724	.9	[1]	[1]	[1]	[1]
Chemical	7,713	1.9	[1]	[1]	[1]	[1]
Civil	5,504	1.4	[1]	[1]	[1]	[1]
Electrical/electronics	13,081	3.3	[1]	[1]	[1]	[1]
Materials science	7,596	1.9	[1]	[1]	[1]	[1]
Mechanical	5,923	1.5	[1]	[1]	[1]	[1]
Nuclear	2,331	.6	[1]	[1]	[1]	[1]
Systems design	3,962	1.0	[1]	[1]	[1]	[1]
Other	13,952	3.5	[1]	[1]	[1]	[1]
Life scientists	101,401	25.7	[1]	[1]	[1]	[1]
Biological scientists	60,919	15.4	69,500	17.9	53,000	14.7
Agricultural scientists	16,005	4.1	18,900	4.9	15,600	4.3
Medical scientists	24,477	6.2	14,700	3.8	21,600	6.0
Psychologists	49,716	12.6	51,300	13.3	39,700	11.0
Social scientists	63,749	16.1	60,000	15.5	40,300	11.1
Economists	18,107	4.6	[1]	[1]	[1]	[1]
Sociologists/anthropologists	13,426	3.4	[1]	[1]	[1]	[1]
Other social scientists	32,216	8.2	[1]	[1]	[1]	[1]
Nonscience/nonengineering	[2]	[2]	[1]	[1]	23,600	6.5
No report	[2]	[2]	[1]	[1]	18,400	5.1

[1] NAS/NRC does not provide data for this category.

[2] Not applicable to NSF classification.

NOTE: Percents may not add to 100 because of rounding.

SOURCES: National Science Foundation and National Academy of Sciences/National Research Council

Year of the doctorate—Individuals were grouped according to year of doctorate to assure that all graduating cohorts were adequately represented. Since the earlier classes had fewer graduates, a larger number of years was grouped. As the size of classes increased in later years, the number of classes included in a cohort was decreased.

Racial/ethnic identification—This stratum was selected to assure that racial/ethnic minorities would be adequately sampled. Racial/ethnic data were available beginning with the 1973 graduating cohort.

Citizenship—A nonresponse bias study[3] of the Survey of Doctorate Recipients revealed a higher percentage of nonrespondents among foreign citizens and residents than U.S. citizens. Accordingly, citizenship was included as a stratification variable to assure that foreign citizens were adequately represented.

sampling and mailing

The 1983 survey sample of 54,900 individuals was selected from a sampling frame[4] of 423,500 Ph. D. scientists and engineers, an overall sampling rate of about 13 percent. To assure adequate representation of small groups within the population, variable sampling rates were used. Within small cells this necessitated the inclusion of all available cases, whereas larger cells did not need to be so heavily sampled to yield reliable statistics. Accordingly, as cell size increased, an increasing number, but decreasing percent, of cases was included in the sample.

Initial mailing of the questionnaire took place in May 1983; followup mailings to those who had not yet responded were conducted in July and September. In addition, a followup postcard mailing was conducted in November, 1983, in which nonrespondents were asked to provide responses to key questionnaire items including employment status, field, type of employer, primary work activity, academic rank, tenure status, marital status, and citizenship.

response rates

From the survey sample drawn, approximately 1,800 individuals were determined to be deceased or otherwise outside the scope of the survey; this resulted in an active sample of 53,055 scientists and engineers. Based on analysis of undeliverable questionnaires and other related information, the number of individuals assumed to have been contacted was 47,231. A total of 35,011 survey responses was received. The survey yielded an overall response rate of 66.0 percent of the active sample and 74.1

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[3] Andrew W. Spisak and Betty D. Maxfield, *The Effects of Nonresponse Bias on the 1975 Survey of Doctoral Scientists and Engineers* (Washington, D.C.: National Academy of Sciences, 1979) and National Academy of Sciences, *Science, Engineering, and Humanities Doctorates in the United States*, *op. cit.*

[4] The sampling frame includes those deceased, those residing in foreign countries, and those with doctorates in education or professional fields who were working in science and engineering. Thus, this number exceeds the total population estimates presented in the tables of this report.

percent of those contacted. Sample sizes and response rates for particular characteristics of the 1983 survey are presented in table A-2.

Since the various cells in the sample were not equally represented, it was necessary to assign differential weights to generate estimates of the total population; i.e., each response was weighted so that the statistics represent, as nearly as possible, the results that would have been obtained if the entire population had been surveyed. The responses received from the survey sample were assigned a response weight that is the product of the nonresponse ratio and the sample weight.[5]

Table A-2. Stratification, sample, and survey responses of doctoral scientists and engineers: 1983 Survey of Doctorate Recipients

Stratification category	Sampling frame[1]	Active sample[2]	Sample contacted[3]	Survey responses	Response rates[4]	
					A	B
Total	423,469	53,055	47,231	35,011	66.0	74.1
Segment/Citizenship:						
U.S. scientist/engineer, unknown citizenship	62,145	7,601	7,060	5,457	71.8	77.3
U.S. scientist/engineer, U.S. citizenship	294,777	36,229	32,759	25,423	70.2	77.6
U.S. scientist/engineer, foreign citizenship	46,787	6,994	5,704	2,917	41.7	51.1
U.S. non-scientist/engineer, unknown citizenship	2,367	195	175	133	68.2	76.0
U.S. non-scientist/engineer, U.S. citizenship	5,666	320	296	234	73.1	79.1
U.S. non-scientist/engineer, foreign citizenship	139	55	50	35	63.6	70.0
Foreign institution Ph.D.	11,588	1,661	1,187	807	48.6	68.0
Field of Ph.D./Employment:						
Mathematics	20,620	3,820	3,[illegible]19	2,486	65.1	72.7
Computer sciences	2,511	852	721	559	65.6	77.5
Physics/astronomy	33,592	3,839	3,443	2,503	65.2	72.7
Chemistry	54,476	5,882	5,168	3,872	65.8	74.9
Environmental sciences	13,388	2,911	2,597	2,040	70.1	78.6
Engineering	60,661	4,018	3,504	2,453	61.1	70.0
Biosciences	108,437	18,910	16,972	12,817	67.8	75.5
Psychology	53,906	6,228	5,514	4,100	65.8	74.4
Social sciences	67,109	5,512	4,948	3,552	64.4	71.8
Other/nonscience/unknown	8,769	1,083	945	629	58.1	66.6
Year of Ph.D.:						
1938-57	68,313	8,176	7,555	5,804	71.0	76.8
1958-65	62,612	6,476	6,030	4,548	70.2	75.4
1966-69	57,722	6,006	5,473	4,054	67.5	74.1
1970-74	92,481	11,828	10,526	7,610	64.3	72.3
1975-76	35,995	6,484	5,597	3,962	61.1	70.8
1977-78	34,643	4,393	3,818	2,787	63.4	73.0
1979-80	34,646	4,400	3,837	2,840	64.5	74.0
1981-82	35,665	4,711	4,016	3,152	66.9	78.5
Merged cohorts[5]	717	393	274	191	48.6	69.7
Unknown	675	188	111	63	33.5	56.8
Sex:						
Men	386,665	34,915	31,194	22,983	65.8	73.7
Women	56,804	18,140	16,037	12,023	66.3	75.0
Race/Ethnic Identification:						
Pre-1973[6]	245,740	27,026	24,686	18,533	68.6	75.1
White/unknown	154,147	13,480	16,197	12,512	67.7	77.2
Minorities	23,582	7,549	6,348	3,966	52.5	62.5

[1] Includes those deceased and those residing in foreign countries.

[2] Excludes those deceased or determined to be out of scope prior to the 1983 survey.

[3] Consists of individuals for whom valid addresses were assumed to have been obtained.

[4] Response rate A is the number of survey responses divided by the number in the active sample; response rate B is the number of responses divided by the number assumed to have been contacted.

[5] Created for certain small subgroups.

[6] Racial/ethnic data not available for stratification purposes prior to fiscal year 1973.

SOURCE: National Academy of Sciences/National Research Council

definitions

A copy of the questionnaire and accompanying material are included in section C. The following definitions are provided to permit effective use of the data presented in the report.

Field of science or engineering was derived primarily from responses to question 4 which requested the name and code number of the specialty most closely related to the respondent's principal employment. These codes were selected from the Employment Specialties List included with the questionnaire. Individuals failing to respond to question 4 as well as those who reported non-S/E employment were assigned the specialty of their doctoral degree. Specialties were grouped to form fields according to the classification presented in table A-3.

The 1983 Employment Specialties List was modified somewhat to make it more consistent with the revised Specialties List used with the 1982 Survey of Earned Doctorates.[6] Among these changes were the addition of a number of employment specialty codes including several engineering specialty fields. In addition, the specialty field "audiology and speech pathology" was shifted from the education and professional fields to medical sciences.

In the data tabulations appearing in this report, the field "agricultural economics," which was formerly a part of agricultural science was shifted to the field of economics in order to be more consistent with other NSF field classifications.

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[5] The nonresponse ratio is the number of survey sample cases in the stratum divided by number of responses in the stratum. The sample weights (Ws) and the response weights (Wr) for each stratum were computed as follows:

$Ws_h = \frac{N_h}{n_h}$ where N_h and n_h are the respective population and sample sizes of the stratum (h).

$Wr_h = \frac{N_h}{n_h} \cdot \frac{\hat{n}_h}{r_h}$ where $\hat{n}_h$ is the number of survey sample cases in the stratum and r_h is the number of survey responses that stratum.

[6] In 1983, the Specialties List of the Survey of Earned Doctorates was revised to conform to the "Classification of Instructional Programs" taxonomy of the National Center for Education Statistics.

Table A-3. Science/engineering (S/E) field classification of specialties: 1983 Survey of Doctorate Recipients

Field	Specialty code
All S/E fields	000 to 799
Physical scientists	101 to 299
Chemists	200 to 299
Physicists/astronomers	101 to 199
Mathematical scientists	000 to 060, 082 to 099
Mathematicians	000 to 052, 060, 082 to 099
Statisticians	055
Computer specialists	071 to 081
Environmental scientists	301 to 399
Earth scientists	301 to 360, 388 to 395, 398, 399
Oceanographers	370, 397
Atmospheric scientists	381 to 383
Engineers	400 to 499
Aeronautical/astronautical	400
Chemical	430
Civil	420, 480
Electrical/electronics	436, 437, 440, 445
Materials science	435, 475, 490, 497
Mechanical	470, 485
Nuclear	455
Systems design	476 to 478
Other	410, 415, 450, 460, 465, 479, 486, 487, 498, 499
Life scientists	500, 503 to 599
Biological scientists	540 to 599
Agricultural scientists	500, 503 to 519
Medical scientists	520 to 539
Psychologists	600 to 699
Social scientists	521, 700, to 799
Economists	501, 720, 725
Sociologists/anthropologists	700, 710
Other social scientists	703 to 709, 727 to 799

SOURCE: National Science Foundation

As a result of these changes the field totals yielded by the 1983 survey have been produced on a different basis than earlier surveys. The time-series tables presented at the beginning of this report have been generated using the 1983 field groupings in order to produce the most consistent set of estimates over time and should be used in tracing historical trends.

As stated earlier, the NSF field definition, which pertains to all of the statistical tables presented in this report, differs from the field definition used by NAS/NRC in reporting the results of this survey.[7] Care should be exercised, therefore, in comparing data from these two sources.

Type of employer was based on responses to question 5. The category "educational insitutions" includes junior colleges, 2-year colleges, technical institutes, medical schools, 4-year colleges or universities, and elementary or secondary school systems. Private foundations are included in the category "nonprofit organizations."

Geographic location was based primarily from responses to question 3 on the location of employment. Individuals not reporting place of employment or not employed were classified by their mailing address.

University or 4-year college teachers include those individuals who reported "4-year college" or "university, other than medical school," as their principal employer under question 5 and also reported "teaching" as their primary or secondary work activity under question 6a.

Primary work activity was determined from responses to question 6a. The term "development" encompasses design as well as the development of equipment, products, systems, or data. "Sales/professional services" includes sales, marketing, purchasing, estimating, and professional services to individuals, but excludes consulting which is treated as a separate work activity. The work activities "writing, editing, operations, curatorial work, archival work, performing arts, quality control, and testing and evaluation," have been aggregated with "other" to form a single category.

Prior to 1979, options under the category "management/administration" included (1) research and development, (2) other than research and development, and (3) both research and development and other than research and development. In 1979, these options were changed to (1) research and development, (2) educational programs, and (3) other. In the presentation of the estimates in this report, including the time-series tables, the "management of research and development" category has been retained, whereas the latter two categories have been aggregated to form a single category "other than research and development."

Salary data were derived from responses to question 7 which requested information regarding annual salary before deductions for income tax, social security, retirement, etc., but excluding bonuses, overtime, summer teaching, or other payment for professional work. Salaries reported are median annual salaries, rounded to the nearest $100 and computed for full-time employed civilian scientists and engineers only. Differences between calendar-year salaries (11 to 12 months) and academic-year salaries (9 to 10 months) for scientists and engineers employed in educational institutions have been accommodated by multiplying academic-year salaries by eleven-ninths to adjust to a calendar-year scale.[8]

Racial/ethnic data were based on questions relating to race and Hispanic heritage.

The race/ethnic data appearing in the time-series tables of this report may differ significantly from earlier published estimates. Analysis of racial/ethnic information over time suggested that there were inaccuracies in these data, especially in the reported number of Hispanics and American Indians. Accordingly, racial/ethnic data from the 1981 file were analyzed and, after modification, used for the 1983 file. For subsequent doctorate recipients (beginning with 1981 graduates) racial/ethnic identity is established from information yielded by the annual Survey of Earned Doctorates and is not subject to change where a response has been provided. As a result of these modifications, race/ethnic data are expected to be more accurate and stable over time.

Modification of racial/ethnic data on Hispanics and American Indians was based on analyses of survey responses which included the following considerations:

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[7] National Academy of Sciences, *Science, Engineering, and Humanities Doctorates, op. cit.*

[8] Except for table B-20 where salary base period is included as a variable.

a. Some individuals who had been classified as "non-Hispanic" should have been classified as "no response." In these cases, data from earlier survey responses or from the Survey of Earned Doctorates were used, if available, to assign a response.

b. A large fraction of individuals who reported themselves as American Indians in 1981 had changed their response over time. Accordingly, all individuals in the 1981 file classified as American Indians were considered on a case-by-case basis and reclassified into the race category most often reported. Those cases in which no clear-cut response patterns emerged were classified as "other" and this category was compared with the race response from the 1983 survey for final disposition.

sampling errors

The survey data presented in this report are subject to error including those resulting from sampling. Although the data are based on a stratified sample survey, sampling errors presented below have been calculated assuming simple random sampling techniques. Comparisons between sampling errors computed on this basis and those that take stratification into account are presented in a recent NAS/NRC report[9] based on the 1981 survey. In that analysis it was determined that for most variables, the differences between the two errors are small; thus, a useful approximation of the sampling error appropriate to the variable designated categories appearing in this report is provided by the following formula:

$$s = \sqrt{\frac{N-n}{N-1}} \cdot \sqrt{\frac{p(1-p)}{n}}$$

where N = population estimate
n = sample size
p = proportion possessing attribute

Since the finite population correction factor $((N-n)/(N-1))^{1/2}$ is expected to have a negligible effect on most statistics presented in this document, it has been omitted in the calculation of sampling errors. If y is defined as the number of individuals being estimated, the standard error can be expressed as:

$$s = (y(N-y)/n)^{1/2}$$

Sample size (n) can be estimated by multiplying the population estimate (N) by the weighting fraction; i.e., the sampling fraction corrected for nonresponse. Table A-4 presents the mean weighting fractions for selected groups of employed Ph. D. scientists and engineers.

The following tables present the estimated standard errors associated with a range of values for some selected populations based upon average weighting fractions across all fields. For example, table B-9 shows that about 20,000 Ph. D. scientists and engineers employed in business/industry were engaged primarily in the management/administration of research and development. The table of standard errors for individuals employed in business/industry presented below shows that an estimate of 20,000 has a standard error of about 470. This value, when added to and subtracted from 20,000, yields a confidence interval within which about 68 percent of all sample estimates, surveyed under the same conditions, will fall. To increase the level of confidence, the standard error can be multiplied by an appropirate coefficient; e.g., ±1.65 standard errors will yield about a 90-percent confidence interval. ±2 standard errors about a 95-percent confidence interval.

Similar tables of standard errors for other employment sectors and for employed women are presented below.

In addition, the data in table A-4 may be used in estimating the standard errors of estimates for other employed groups. For example, table B-8 shows that of the nearly 5,000 employed black scientists, about 500 were engaged primarily in basic reseach. Table A-4 shows that the mean weighting fraction for black scientists and engineers is .228. Multiplying this value by the employed total (5,000) yields an estimated sample size (n) of 1,140. Substituting these values in the formula listed above yields an estimate of 44; i.e.,

$$s = [500\ (5{,}000 - 500)/1{,}140]^{1/2} = 44$$

Multiplication of this value by the appropriate coefficient can be done to yield the desired confidence interval.

The reader is cautioned that the sampling errors computed on the basis of the procedure described above yield approximations and must therefore be considered estimates rather than precise measures.

Table A-4. Mean weighting fractions for selected groups of employed doctoral scientists and engineers: 1983 Survey of Doctorate Recipients

Total scientists/engineers	.084
Men	.065
Women	.215
Whites	.081
Blacks	.223
Asians	.091
Total scientists	.092
Physical scientists	.078
Chemists	.080
Physicists/astronomers	.076
Mathematical scientists	.115
Mathematicians	.119
Statisticians	.097
Computer specialists	.110
Environmental scientists	.123
Earth scientists	.123
Oceanographers	.140
Atmospheric scientists	.107
Engineers	.049
Aeronautical/astronautical	.052
Chemical	.04[illegible]
Civil	.04[illegible]
Electrical/electronics	.049
Materials science	.050
Mechanical	.040
Nuclear	.047
Systems design	.061
Other	.050
Life scientists	.118
Biological scientists	.111
Agricultural scientists	.106
Medical scientists	.143
Psychologists	.077
Social scientists	.058
Economists	.051
Sociologists/anthropologists	.066
Other social scientists	.059

SOURCE: National Science Foundation

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[9] National Academy of Sciences, *Science, Engineering, and Humanities Doctorates in the United States: 1981 Profile* (Washington, D.C., 1982).

Generalized standard errors for doctoral scientists and engineers
1983 Survey of Doctorate Recipients
Total employed

Standard errors of totals		Standard errors of percents						
			Estimated percent					
Size of estimate	Estimated sampling error	Base of percent	1/99	2/98	5/95	10/90	25/75	50
100	35	500	1.53	2.15	3.35	4.62	6.66	7.69
200	50	1,000	1.08	1.52	2.37	3.26	4.71	5.44
500	75	2,000	.77	1.08	1.68	2.31	3.33	3.85
1,000	110	5,000	.48	.68	1.06	1.46	2.11	2.43
2,000	150	10,000	.34	.48	.75	1.03	1.49	1.72
5,000	240	15,000	.28	.39	.61	.84	1.22	1.40
10,000	340	20,000	.24	.34	.53	.73	1.05	1.22
15,000	410	30,000	.20	.28	.43	.60	.86	.99
20,000	470	40,000	.17	.24	.37	.52	.74	.86
30,000	570	50,000	.15	.22	.34	.46	.67	.77
40,000	650	75,000	.13	.18	.27	.38	.54	.63
50,000	720	100,000	.11	.15	.24	.33	.47	.54
75,000	840	150,000	.09	.12	.19	.27	.38	.44
100,000	930	200,000	.08	.11	.17	.23	.33	.38
150,000	1,030	250,000	.07	.10	.15	.21	.30	.34
200,000	1,040	275,000	.07	.09	.14	.20	.28	.33
250,000	980	300,000	.06	.09	.14	.19	.27	.31
300,000	820	325,000	.06	.08	.13	.18	.26	.30

SOURCE: National Science Foundation

Employed in educational institutions

Standard errors of totals		Standard errors of percents						
			Estimated percent					
Size of estimate	Estimated sampling error	Base of percent	1/99	2/98	5/95	10/90	25/75	50
100	35	500	1.50	2.10	3.27	4.51	6.51	7.51
200	50	1,000	1.06	1.49	2.32	3.19	4.60	5.31
500	75	2,000	.75	1.05	1.64	2.25	3.25	3.76
1,000	110	5,000	.47	.67	1.04	1.43	2.06	2.38
2,000	150	10,000	.33	.47	.73	1.01	1.45	1.68
5,000	230	15,000	.27	.38	.60	.82	1.19	1.37
10,000	330	20,000	.24	.33	.52	.71	1.03	1.19
15,000	400	30,000	.19	.27	.42	.58	.84	.97
20,000	450	40,000	.17	.24	.37	.50	.73	.84
30,000	540	50,000	.15	.21	.33	.45	.65	.75
40,000	600	75,000	.12	.17	.27	.37	.53	.61
[illegible]	[illegible]	100,000	.11	.15	.23	.32	.46	.53
75,000	[illegible]	125,000	.09	.13	.21	.29	.41	.48
100,000	740	150,000	.09	.12	.19	.26	.38	.43
125,000	720	175,000	.08	.11	.18	.24	.35	.40
150,000	630							

SOURCE: National Science Foundation

Employed in business and industry

Standard errors of totals		Standard errors of percents						
			Estimated percent					
Size of estimate	Estimated sampling error	Base of percent	1/99	2/98	5/95	10/90	25/75	50
100	35	500	1.63	2.29	3.57	4.91	7.09	8.18
200	50	1,000	1.15	1.62	2.52	3.47	5.01	5.79
500	80	2,000	.81	1.15	1.78	2.45	3.54	4.09
1,000	120	5,000	.51	.72	1.13	1.55	2.24	2.59
2,000	160	10,000	.36	.51	.80	1.10	1.58	1.83
5,000	250	15,000	.30	.42	.65	.90	1.29	1.49
10,000	350	20,000	.26	.36	.56	.78	1.12	1.29
15,000	420	30,000	.21	.30	.46	.63	.91	1.06
20,000	470	40,000	.18	.26	.40	.55	.79	.91
30,000	540	50,000	.16	.23	.36	.49	.71	.82
40,000	590	60,000	.15	.21	.33	.45	.65	.75
50,000	610	70,000	.14	.19	.30	.41	.60	.69
60,000	620	80,000	.13	.18	.28	.39	.56	.65
70,000	600	90,000	.12	.17	.27	.37	.53	.61
80,000	560							
90,000	500							
100,000	400							

SOURCE: National Science Foundation

Employed by the Federal Government

Standard errors of totals		Standard errors of percents						
			Estimated percent					
Size of estimate	Estimated sampling error	Base of percent	1/99	2/98	5/95	10/90	25/75	50
100	35	500	1.50	2.11	3.28	4.52	6.52	7.53
200	50	1,000	1.06	1.49	2.32	3.20	4.61	5.33
500	75	2,000	.75	1.05	1.64	2.26	3.26	3.77
1,000	100	5,000	.47	.67	1.04	1.43	2.06	2.38
2,000	140	10,000	.34	.47	.73	1.01	1.46	1.68
5,000	210	15,000	.27	.39	.60	.83	1.19	1.38
10,000	260	20,000	.24	.33	.52	.71	1.03	1.19
15,000	270							
20,000	230							

SOURCE: National Science Foundation

Employed women

Standard errors of totals		Standard errors of percents						
			Estimated percent					
Size of estimate	Estimated sampling error	Base of percent	1/99	2/98	5/95	10/90	25/75	50
100	20	500	.96	1.35	2.10	2.89	4.17	4.82
200	30	1,000	.68	.95	1.49	2.05	2.95	3.41
500	50	2,000	.48	.67	1.05	1.45	2.09	2.41
1,000	65	5,000	.30	.43	.66	.91	1.32	1.52
2,000	95	10,000	.21	.30	.47	.65	.93	1.08
5,000	140	15,000	.18	.25	.38	.53	.76	.88
10,000	190	20,000	.15	.21	.33	.46	.66	.76
15,000	220	25,000	.14	.19	.30	.41	.59	.68
20,000	230	30,000	.12	.17	.27	.37	.54	.62
30,000	230	35,000	.11	.16	.25	.35	.50	.58
40,000	180	40,000	.11	.15	.23	.32	.47	.54

SOURCE: National Science Foundation

appendix b

detailed statistical tables

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TABLE B-1. CHARACTERISTICS OF DOCTORAL SCIENTISTS AND ENGINEERS IN THE UNITED STATES: 1983

CHARACTERISTICS	NUMBER	PERCENT
TOTAL	395,033	100.0
FIELD		
SCIENTISTS	331,247	83.9
PHYSICAL SCIENTISTS	69,579	17.6
CHEMISTS	45,569	11.5
PHYSICISTS/ASTRONOMERS	24,010	6.1
MATHEMATICAL SCIENTISTS	17,357	4.4
MATHEMATICIANS	14,470	3.7
STATISTICIANS	2,887	.7
COMPUTER/INFORMATION SPEC	12,304	3.1
ENVIRONMENTAL SCIENTISTS	17,141	4.3
EARTH SCIENTISTS	13,077	3.3
OCEANOGRAPHERS	1,798	.5
ATMOSPHERIC SCIENTISTS	2,266	.6
LIFE SCIENTISTS	101,401	25.7
BIOLOGICAL SCIENTISTS	60,919	15.4
AGRICULTURAL SCIENTISTS	16,005	4.1
MEDICAL SCIENTISTS	24,477	6.2
PSYCHOLOGISTS	49,716	12.6
SOCIAL SCIENTISTS	63,749	16.1
ECONOMISTS	18,107	4.6
SOCIOLOGISTS/ANTHRO	13,426	3.4
OTHER SOCIAL SCIENTISTS	32,216	8.2
ENGINEERS	63,786	16.1
AERO/ASTRO ENGINEERS	3,724	.9
CHEMICAL ENGINEERS	7,713	2.0
CIVIL ENGINEERS	5,504	1.4
ELEC./ELECTRON. ENGINEERS	13,081	3.3
MATERIALS SCI. ENGINEERS	7,596	1.9
MECHANICAL ENGINEERS	5,923	1.5
NUCLEAR ENGINEERS	2,331	.6
SYSTEMS DESIGN ENGINEERS	3,962	1.0
OTHER ENGINEERS	13,952	3.5
SEX		
MEN	340,482	86.2
WOMEN	54,551	13.8
CITIZENSHIP		
USA	372,810	94.4
FOREIGN	22,048	5.6
NO REPORT	175	
RACE		
WHITE	352,276	89.2
BLACK	5,273	1.3
AM.INDIAN/ALSKN NATIVE	443	.1
ASIAN/PACIFIC ISLANDER	30,910	7.8
OTHER	205	.1
NO REPORT	5,926	1.5
ETHNICITY		
HISPANIC	5,646	1.4
NONHISPANIC	338,826	85.8
NO REPORT	50,561	12.8
AGE		
UNDER 30	6,810	1.7
30-34	49,709	12.6
35-39	78,484	19.9
40-44	82,646	20.9
45-49	53,263	13.5
50-54	41,019	10.4
55-59	33,658	8.5
60-64	25,334	6.4
65-69	15,455	3.9
70 OR OVER	8,302	2.1
NO REPORT	353	.1
EMPLOYMENT STATUS		
FULL-TIME EMPLOYED	341,912	86.6
SCIENCE/ENGINEERING	303,484	76.8
OTHER/UNKNOWN FIELD	38,428	9.7
PART-TIME EMPLOYED	16,463	4.2
SCIENCE/ENGINEERING	13,390	3.4
OTHER/UNKNOWN FIELD	3,073	.8
POSTDOCTORATE	10,945	2.8
UNEMPLOYED/SEEKING EMPL.	3,674	.9
NOT EMPLOYED/NOT SEEKING	3,686	.9
RETIRED	13,815	3.5
OTHER	790	.2
NO REPORT	3,748	.9
TYPE OF EMPLOYER		
BUSINESS/INDUSTRY	113,463	28.7
EDUCATIONAL INSTITUTION	196,050	49.6
4-YR. COLL./UNIV	187,554	47.5
2-YR. COLLEGES	5,421	1.4
ELEM/SEC. SCHOOLS	3,075	.8
HOSPITALS/CLINICS	10,435	2.6
NONPROFIT ORGS	11,894	3.0
FEDERAL GOVT	25,793	6.5
MILITARY/COMM. CORPS	2,090	.5
STATE GOVT	5,142	1.3
OTHER GOVT	2,575	.7
OTHER	1,002	.3
NOT EMPLOYED	25,713	6.5
NO REPORT	876	.2
PRIMARY WORK ACTIVITY		
RESEARCH AND DEVELOPMENT	124,788	31.6
BASIC RESEARCH	57,137	14.5
APPLIED RESEARCH	47,374	12.0
DEVELOPMENT	20,277	5.1
MANAGEMENT/ADMINISTRATION	61,813	15.6
OF R&D	31,418	8.0
OF OTHER	30,395	7.7
TEACHING	108,236	27.4
CONSULTING	12,746	3.2
SALES/PROF. SERVICES	29,820	7.5
OTHER	24,163	6.1
NOT EMPLOYED	25,713	6.5
NO REPORT	7,754	2.0
YEARS OF PROF. EXPERIENCE		
1 OR LESS YEARS	5,662	1.4
2-4 YEARS	32,968	8.3
5-9 YEARS	62,790	15.9
10-14 YEARS	66,016	16.7
15-19 YEARS	51,638	13.1
20-24 YEARS	37,755	9.6
25-29 YEARS	28,934	7.3
30-34 YEARS	24,508	6.2
35-39 YEARS	11,581	2.9
40 OR MORE YEARS	10,219	2.6
NO REPORT	62,962	15.9
FEDERAL SUPPORT		
RECEIVING SUPPORT	143,936	36.4
NOT RECEIVING SUPPORT	190,194	48.1
STATUS UNKNOWN	7,912	2.0
NOT EMPLOYED	25,713	6.5
NO REPORT	27,278	6.9

* LESS THAN .05 PERCENT
NOTE: PERCENTS MAY NOT ADD TO 100 BECAUSE OF ROUNDING
SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE B-2. SALARY DISTRIBUTION OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD: 1983

FIELD	LOWER DECILE	LOWER QUARTILE	MEDIAN	UPPER QUARTILE	UPPER DECILE
TOTAL	$25,600	$31,700	$40,100	$50,200	$60,800
SCIENTISTS	$25,000	$30,600	$38,200	$48,300	$60,300
PHYSICAL SCIENTISTS	$28,200	$34,800	$42,300	$51,300	$62,300
CHEMISTS	$27,800	$34,400	$41,900	$50,800	$[illegible]2,000
PHYSICISTS/ASTRONOMERS	$29,100	$35,600	$42,900	$52,300	$60,700
MATHEMATICAL SCIENTISTS	$25,300	$29,900	$36,600	$44,800	$54,200
MATHEMATICIANS	$25,000	$29,500	$36,400	$44,400	$53,800
STATISTICIANS	$26,800	$31,600	$37,400	$46,100	$56,100
COMPUTER/INFORMATION SPECIALISTS	$26,100	$32,900	$40,400	$49,300	$60,600
ENVIRONMENTAL SCIENTISTS	$26,100	$33,400	$40,900	$52,100	$63,100
EARTH SCIENTISTS	$27,100	$34,200	$41,500	$53,300	$65,600
OCEANOGRAPHERS	$25,000	$28,700	$36,700	$44,800	$53,700
ATMOSPHERIC SCIENTISTS	$26,400	$33,300	$41,600	$50,600	$57,500
LIFE SCIENTISTS	$25,000	$30,300	$37,300	$47,400	$60,000
BIOLOGICAL SCIENTISTS	$24,300	$29,500	$36,200	$45,100	$55,700
AGRICULTURAL SCIENTISTS	$26,100	$30,300	$37,900	$45,500	$55,200
MEDICAL SCIENTISTS	$25,800	$[illegible]2,500	$41,200	$55,100	$70,300
PSYCHOLOGISTS	$23,900	$2[illegible],500	$35,800	$45,100	$60,100
SOCIAL SCIENTISTS	$24,200	$28,800	$36,000	$45,600	$58,500
ECONOMISTS	$28,200	$33,300	$41,400	$52,900	$65,600
SOCIOLOGISTS/ANTHRO.	$22,700	$26,500	$32,100	$39,800	$48,300
OTHER SOCIAL SCIENTISTS	$23,400	$27,500	$35,000	$44,000	$55,000
ENGINEERS	$34,200	$39,800	$46,600	$55,600	$65,700
AERO/ASTRO ENGINEERS	$33,100	$39,800	$47,500	$52,300	$60,300
CHEMICAL ENGINEERS	$35,900	$40,800	$50,600	$62,300	$76,500
CIVIL ENGINEERS	$31,300	$37,900	$42,500	$50,200	$57,800
EL/C./ELECTRON. ENGINEERS	$34,800	$40,600	$48,600	$59,000	$71,400
MATERIALS SCI. ENGINEERS	$34,900	$40,100	$47,400	$56,000	$64,700
MECHANICAL ENGINEERS	$34,100	$39,400	$45,500	$50,900	$60,500
NUCLEAR ENGINEERS	$36,400	$42,400	$46,200	$53,200	$61,500
SYSTEMS DESIGN ENGINEERS	$36,700	$41,800	$48,400	$53,700	$62,500
OTHER ENGINEERS	$30,900	$37,500	$45,300	$55,600	$65,100

NOTE: MEDIAN SALARIES COMPUTED ONLY FOR FULL-TIME CIVILIANS.
SOURCE: NATIONAL SCIENCE FOUNDATION

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TABLE B-3. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD AND CITIZENSHIP, 1983

FIELD	TOTAL	USA	NON-USA	NO REPORT
TOTAL....................	395,033	372,810	22,048	175
SCIENTISTS................	331,247	315,583	15,500	164
PHYSICAL SCIENTISTS......	69,579	65,391	4,186	2
CHEMISTS................	45,569	43,187	2,380	2
PHYSICISTS/ASTRONOMERS..	24,010	22,204	1,806	*
MATHEMATICAL SCIENTISTS..	17,357	16,319	1,038	*
MATHEMATICIANS...........	14,470	13,642	828	*
STATISTICIANS............	2,887	2,677	210	*
COMPUTER/INFORMATION SPEC	12,304	11,417	887	*
ENVIRONMENTAL SCIENTISTS.	17,141	16,194	945	2
EARTH SCIENTISTS.........	13,077	12,291	784	2
OCEANOGRAPHERS...........	1,798	1,765	33	*
ATMOSPHERIC SCIENTISTS..	2,266	2,138	128	*
LIFE SCIENTISTS..........	101,401	96,790	4,521	90
BIOLOGICAL SCIENTISTS...	60,919	58,289	2,574	56
AGRICULTURAL SCIENTISTS.	16,005	15,206	792	7
MEDICAL SCIENTISTS......	24,477	23,295	1,155	27
PSYCHOLOGISTS............	49,716	48,934	729	53
SOCIAL SCIENTISTS........	63,749	60,538	3,194	17
ECONOMISTS..............	18,107	16,649	1,441	17
SOCIOLOGISTS/ANTHRO.....	13,426	12,853	573	*
OTHER SOCIAL SCIENTISTS.	32,216	31,036	1,180	*
ENGINEERS................	63,786	57,227	5,548	11
AERO/ASTRO ENGINEERS.....	3,724	3,307	417	*
CHEMICAL ENGINEERS.......	7,713	6,590	1,123	*
CIVIL ENGINEERS..........	5,504	4,805	690	9
ELEC./ELECTRN. ENGINEERS	13,081	11,672	1,409	*
MATERIALS SCI. ENGINEERS.	7,506	6,708	806	2
MECHANICAL ENGINEERS.....	5,923	5,251	672	*
NUCLEAR ENGINEERS........	2,331	2,249	82	*
SYSTEMS DESIGN ENGINEERS.	3,962	3,784	178	*
OTHER ENGINEERS..........	13,952	12,781	1,171	*

* NO CASES REPORTED

SOURCE: NATIONAL SCIENCE FOUNDATION

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TABLE B-4. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, SEX, RACE, AND EMPLOYMENT STATUS: 1983

FIELD, SEX, AND RACE	TOTAL	EMPLOYED FULL-TIME			EMPLOYED PART-TIME			POST-DOC-TORAL	UNEMP/SEEKING EMP.	UNEMP/NOT SEEKING EMP.	RE-TIRED	OTHER	NO REPORT
		TOTAL	SCI/ENG.	OTHER/UNKNOWN FIELD	TOTAL	SCI/ENG.	OTHER/UNKNOWN FIELD						
ALL FIELDS													
TOTAL	395,833	341,912	303,484	38,428	16,463	13,390	3,073	10,945	3,674	3,686	13,815	790	3,748
SEX													
MEN	340,482	302,439	269,245	33,194	10,169	8,062	2,107	7,886	2,412	1,625	12,157	519	3,275
WOMEN	54,551	39,473	34,239	5,234	6,294	5,328	966	3,059	1,262	2,061	1,658	271	473
RACE													
WHITE	352,276	303,804	270,237	33,567	15,348	12,602	2,746	9,303	3,155	3,302	13,129	761	3,474
BLACK	5,273	4,515	3,671	844	218	129	89	315	96	35	131	5	58
AM.INDIAN/ALSKN NATIVE	443	400	386	14	7	3	4	11	7	1	15	2	*
ASIAN/PACIFIC ISLANDER	30,910	28,014	25,524	2,490	551	402	149	1,175	345	298	324	7	196
OTHER	205	202	178	24	*	*	*	*	*	2	*	*	1
NO REPORT	5,926	4,977	3,488	1,489	339	254	85	241	71	68	216	15	19
SCIENTISTS													
TOTAL	331,247	282,182	248,822	33,360	14,973	12,191	2,782	10,620	3,403	3,501	12,593	774	3,201
SEX													
MEN	277,830	243,721	215,555	28,166	8,716	6,895	1,821	7,588	2,155	1,458	10,942	506	2,744
WOMEN	53,417	38,461	33,267	5,194	6,257	5,296	961	3,032	1,248	2,043	1,651	268	457
RACE													
WHITE	300,648	255,578	226,114	29,464	13,966	11,495	2,471	9,178	2,939	3,204	12,031	745	3,007
BLACK	4,858	4,105	3,292	813	218	129	89	215	96	32	131	5	56
AM.INDIAN/ALSKN NATIVE	404	361	358	3	7	3	4	11	7	1	15	2	*
ASIAN/PACIFIC ISLANDER	20,094	17,767	15,879	1,888	517	370	147	975	290	214	200	7	124
OTHER	202	199	175	24	*	*	*	*	*	2	*	*	1
NO REPORT	5,041	4,172	3,004	1,168	265	194	71	241	71	48	216	15	13
PHYSICAL SCIENTISTS													
TOTAL	69,579	60,191	53,010	7,181	1,844	1,445	399	1,951	806	553	3,502	104	628
SEX													
MEN	64,770	56,690	49,969	6,721	1,447	1,130	317	1,674	688	277	3,310	93	591
WOMEN	4,809	3,501	3,041	460	397	315	82	277	118	276	192	11	37
RACE													
WHITE	61,802	53,285	47,039	6,246	1,671	1,284	387	1,565	682	509	3,391	101	598
BLACK	753	584	463	121	37	37	*	69	23	*	37	*	3
AM.INDIAN/ALSKN NATIVE	68	67	67	*	*	*	*	*	*	*	*	1	*
ASIAN/PACIFIC ISLANDER	5,874	5,341	4,800	541	101	89	12	242	95	27	41	*	27
OTHER	24	22	22	*	*	*	*	*	*	2	*	*	*
NO REPORT	1,058	892	619	273	35	35	*	75	6	15	33	2	*
CHEMISTS													
TOTAL	45,569	38,722	34,637	4,085	1,409	1,130	279	1,167	604	414	2,836	58	359
SEX													
MEN	41,591	35,817	32,110	3,707	1,095	892	203	935	502	177	2,676	49	340
WOMEN	3,978	2,905	2,527	378	314	238	76	232	102	237	160	9	19
RACE													
WHITE	40,339	34,091	30,448	3,643	1,250	983	267	941	552	380	2,749	57	339
BLACK	486	376	330	46	37	37	*	35	*	*	35	*	3
AM.INDIAN/ALSKN NATIVE	43	42	42	*	*	*	*	*	*	*	*	1	*
ASIAN/PACIFIC ISLANDER	3,986	3,625	3,373	252	87	75	12	153	46	17	41	*	17
OTHER	23	21	21	*	*	*	*	*	*	2	*	*	*
NO REPORT	672	567	423	144	35	35	*	38	6	15	11	*	*
PHYSICISTS/ASTRONOMERS													
TOTAL	24,010	21,469	18,373	3,096	435	315	120	784	202	139	666	46	269
SEX													
MEN	23,179	20,873	17,859	3,014	352	238	114	739	186	100	634	44	251
WOMEN	831	596	514	82	83	77	6	45	16	39	32	2	18
RACE													
WHITE	21,443	19,194	16,591	2,603	421	301	120	624	130	129	642	44	259
BLACK	267	208	133	75	*	*	*	34	23	*	2	*	*
AM.INDIAN/ALSKN NATIVE	25	25	25	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	1,888	1,716	1,427	289	14	14	*	89	49	10	*	*	10
OTHER	1	1	1	*	*	*	*	*	*	*	*	*	*
NO REPORT	386	325	196	129	*	*	*	37	*	*	22	2	*
MATHEMATICAL SCIENTISTS													
TOTAL	17,357	15,733	13,804	1,929	543	387	156	103	103	112	580	53	130
SEX													
MEN	15,796	14,491	12,713	1,778	391	282	109	82	96	55	528	36	117
WOMEN	1,561	1,242	1,091	151	152	105	47	21	7	57	52	17	13
RACE													
WHITE	15,453	13,915	12,305	1,610	515	377	138	101	93	101	556	50	122
BLACK	183	170	161	9	8	*	8	*	2	*	*	3	*
AM.INDIAN/ALSKN NATIVE	14	6	6	*	*	*	*	*	*	*	8	*	*
ASIAN/PACIFIC ISLANDER	1,413	1,358	1,124	234	18	9	9	2	8	11	8	*	8
OTHER	2	2	2	*	*	*	*	*	*	*	*	*	*
NO REPORT	292	282	206	76	2	1	1	*	*	*	8	*	*
MATHEMATICIANS													
TOTAL	14,470	13,071	11,351	1,720	415	271	144	103	102	102	512	51	114
SEX													
MEN	13,224	12,108	10,517	1,591	281	179	102	82	96	55	462	36	104
WOMEN	1,246	963	834	129	134	92	42	21	6	47	50	15	10
RACE													
WHITE	13,042	11,724	10,271	1,453	387	261	126	101	92	93	488	48	109
BLACK	158	145	139	6	8	*	8	*	2	*	*	3	*
AM.INDIAN/ALSKN NATIVE	12	4	4	*	*	*	*	*	*	*	8	*	*
ASIAN/PACIFIC ISLANDER	1,006	956	771	185	18	9	9	2	8	9	8	*	5
OTHER	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	252	242	166	76	2	1	1	*	*	*	8	*	*
STATISTICIANS													
TOTAL	2,887	2,662	2,453	209	128	116	12	*	1	10	68	2	16
SEX													
MEN	2,572	2,383	2,196	187	110	103	7	*	*	*	66	*	13
WOMEN	315	279	257	22	18	13	5	*	1	10	2	2	3
RACE													
WHITE	2,411	2,191	2,034	157	128	116	12	*	1	8	68	2	13
BLACK	25	25	22	3	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	2	2	2	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	407	402	353	49	*	*	*	*	*	2	*	*	3
OTHER	2	2	2	*	*	*	*	*	*	*	*	*	*
NO REPORT	40	40	40	*	*	*	*	*	*	*	*	*	*

* NO CASES REPORTED

TABLE B-4. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, SEX, RACE, AND EMPLOYMENT STATUS: 1983
CONTINUED

FIELD, SEX, AND RACE	TOTAL	EMPLOYED FULL-TIME			EMPLOYED PART-TIME			POST-DOC-TORAL	UNEMP/ SEEKING EMP.	UNEMP/ NOT SEEKING EMP.	RE-TIRED	OTHER	NO REPORT
		TOTAL	SCI/ ENG.	OTHER/ UNKNOWN FIELD	TOTAL	SCI/ ENG.	OTHER/ UNKNOWN FIELD						
COMPUTER/INFORMATION SPECIALISTS													
TOTAL....................	12,304	11,717	11,543	174	363	363	*	84	*	16	2	31	91
SEX													
MEN....................	11,016	10,599	10,433	166	237	237	*	62	*	2	2	27	87
WOMEN..................	1,288	1,118	1,110	8	126	126	*	22	*	14	*	4	4
RACE													
WHITE..................	11,136	10,589	10,457	132	339	339	*	84	*	7	2	31	84
BLACK..................	49	36	34	2	7	7	*	*	*	*	*	*	6
AM.INDIAN/ALSKN NATIVE	3	3	3	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	954	927	903	24	17	17	*	*	*	9	*	*	1
OTHER..................	6	6	6	*	*	*	*	*	*	*	*	*	*
NO REPORT..............	156	156	140	16	*	*	*	*	*	*	*	*	*
ENVIRONMENTAL SCIENTISTS													
TOTAL....................	17,141	15,394	14,661	733	747	667	80	326	101	43	362	12	156
SEX													
MEN....................	16,153	14,652	13,955	697	623	549	74	278	74	29	340	12	145
WOMEN..................	988	742	706	36	124	118	6	48	27	14	22	*	11
RACE													
WHITE..................	16,131	14,456	13,765	690	733	656	77	288	101	41	346	12	155
BLACK..................	33	33	26	7	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	11	11	11	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	772	739	710	29	14	11	3	17	*	2	*	*	*
OTHER..................	19	18	18	*	*	*	*	*	*	*	*	*	1
NO REPORT..............	175	138	131	7	*	*	*	21	*	*	16	*	*
EARTH SCIENTISTS													
TOTAL....................	13,077	11,832	11,236	596	559	495	64	132	67	32	324	12	119
SEX													
MEN....................	12,373	11,295	10,729	566	474	414	60	117	41	23	302	12	109
WOMEN..................	704	537	507	30	85	81	4	15	26	9	22	*	10
RACE													
WHITE..................	12,270	11,069	10,500	569	545	484	61	119	67	32	308	12	118
BLACK..................	29	29	22	7	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	9	9	9	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	627	607	594	13	14	11	3	6	*	*	*	*	*
OTHER..................	12	11	11	*	*	*	*	*	*	*	*	*	1
NO REPORT..............	130	107	100	7	*	*	*	7	*	*	16	*	*
OCEANOGRAPHERS													
TOTAL....................	1,798	1,538	1,487	51	106	106	*	98	24	2	*	*	30
SEX													
MEN....................	1,608	1,400	1,355	45	78	78	*	77	24	*	*	*	29
WOMEN..................	190	138	132	6	28	28	*	21	*	2	*	*	1
RACE													
WHITE..................	1,726	1,466	1,418	48	106	106	*	98	24	2	*	*	30
BLACK..................	2	2	2	*	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	61	61	58	3	*	*	*	*	*	*	*	*	*
OTHER..................	7	7	7	*	*	*	*	*	*	*	*	*	*
NO REPORT..............	2	2	2	*	*	*	*	*	*	*	*	*	*
ATMOSPHERIC SCIENTISTS													
TOTAL....................	2,266	2,024	1,938	86	82	66	16	96	10	9	38	*	7
SEX													
MEN....................	2,172	1,957	1,871	86	71	57	14	84	9	6	38	*	7
WOMEN..................	94	67	67	*	11	9	2	12	1	3	*	*	*
RACE													
WHITE..................	2,135	1,920	1,847	73	82	66	16	71	10	7	38	*	7
BLACK..................	2	2	2	*	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	2	2	2	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	84	71	58	13	*	*	*	11	*	2	*	*	*
OTHER..................	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT..............	43	29	29	*	*	*	*	14	*	*	*	*	*
LIFE SCIENTISTS													
TOTAL....................	101,401	82,608	76,467	6,141	3,341	2,749	592	6,853	1,201	1,666	4,383	289	1,060
SEX													
MEN....................	82,871	70,037	64,914	5,123	1,902	1,567	335	4,634	691	817	3,680	207	903
WOMEN..................	18,530	12,571	11,553	1,018	1,439	1,182	257	2,219	510	849	703	82	157
RACE													
WHITE..................	91,306	74,284	68,904	5,380	3,088	2,554	534	6,006	1,043	1,487	4,147	268	983
BLACK..................	1,230	1,051	930	121	39	22	17	52	22	12	38	*	16
AM.INDIAN/ALSKN NATIVE	100	74	71	3	*	*	*	10	7	1	7	1	*
ASIAN/PACIFIC ISLANDER	7,154	5,913	5,579	334	163	149	14	674	114	150	79	7	54
OTHER..................	84	84	82	2	*	*	*	*	*	*	*	*	*
NO REPORT..............	1,527	1,202	901	301	51	24	27	111	15	16	112	13	7
BIOLOGICAL SCIENTISTS													
TOTAL....................	60,919	47,813	43,720	4,093	1,977	1,534	443	5,415	946	1,137	2,931	139	561
SEX													
MEN....................	48,431	39,954	36,625	3,329	1,025	773	252	3,600	502	463	2,338	87	462
WOMEN..................	12,488	7,859	7,095	764	952	761	191	1,815	444	674	593	52	99
RACE													
WHITE..................	54,749	42,913	39,307	3,606	1,809	1,414	395	4,753	842	1,016	2,750	126	540
BLACK..................	699	576	496	80	26	9	17	40	14	8	26	*	9
AM.INDIAN/ALSKN NATIVE	47	26	26	*	*	*	*	7	7	*	7	*	*
ASIAN/PACIFIC ISLANDER	4,474	3,577	3,375	202	106	94	12	535	76	103	69	*	8
OTHER..................	21	21	19	2	*	*	*	*	*	*	*	*	*
NO REPORT..............	929	700	497	203	36	17	19	80	7	10	79	13	4
AGRICULTURAL SCIENTISTS													
TOTAL....................	16,005	13,948	12,902	1,046	438	383	55	150	140	69	948	108	204
SEX													
MEN....................	15,234	13,402	12,396	1,006	366	318	48	108	110	37	928	86	197
WOMEN..................	771	546	506	40	72	65	7	42	30	32	20	22	7
RACE													
WHITE..................	14,775	12,932	11,992	940	417	369	48	83	107	45	910	101	180
BLACK..................	78	63	63	*	*	*	*	*	*	3	12	*	*
AM.INDIAN/ALSKN NATIVE	34	31	28	3	*	*	*	3	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	903	741	699	42	7	7	*	64	33	21	6	7	24
OTHER..................	20	20	20	*	*	*	*	*	*	*	*	*	*
NO REPORT..............	195	161	100	61	14	7	7	*	*	*	20	*	*

* NO CASES REPORTED

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TABLE B-4. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, SEX, RACE, AND EMPLOYMENT STATUS: 1983
CONTINUED

FIELD, SEX, AND RACE	TOTAL	EMPLOYED FULL-TIME			EMPLOYED PART-TIME			POST-DOC-TORAL	UNEMP/ SEEKING EMP.	UNEMP/ NOT SEEKING EMP.	RE-TIRED	OTHER	NO REPORT
		TOTAL	SCI/ ENG.	OTHER/ UNKNOWN FIELD	TOTAL	SCI/ ENG.	OTHER/ UNKNOWN FIELD						
MEDICAL SCIENTISTS													
TOTAL....................	24,477	20,847	19,845	1,002	926	832	94	1,288	115	460	504	42	295
SEX													
MEN..................	19,206	16,681	15,893	708	511	476	35	926	79	317	414	34	244
WOMEN................	5,271	4,166	3,952	214	415	356	59	362	36	143	90	8	51
RACE													
WHITE................	21,782	18,439	17,605	834	862	771	91	1,170	94	426	487	41	263
BLACK................	453	412	371	41	13	13	*	12	8	1	*	*	7
AM.INDIAN/ALSKN NATIVE	19	17	17	*	*	*	*	*	*	1	*	*	*
ASIAN/PACIFIC ISLANDER	1,777	1,595	1,505	90	50	48	2	75	5	26	4	1	22
OTHER................	43	43	43	*	*	*	*	*	*	*	*	*	*
NO REPORT............	403	341	304	37	1	*	1	31	8	6	13	*	3
PSYCHOLOGISTS													
TOTAL....................	49,716	41,166	36,742	4,424	4,987	4,495	492	492	535	567	1,157	195	617
SEX													
MEN..................	34,782	30,523	27,446	3,077	2,154	1,836	318	285	316	158	806	76	464
WOMEN................	14,934	10,643	9,296	1,347	2,833	2,659	174	207	219	409	351	119	153
RACE													
WHITE................	47,177	39,046	35,087	3,959	4,741	4,307	434	450	476	550	1,122	195	597
BLACK................	1,023	910	726	184	47	31	16	26	11	4	5	*	20
AM.INDIAN/ALSKN NATIVE	73	68	68	*	5	3	2	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	658	535	448	87	93	66	27	12	15	3	*	*	*
OTHER................	29	29	24	5	*	*	*	*	*	*	*	*	*
NO REPORT............	756	578	389	189	101	88	13	4	33	10	30	*	*
SOCIAL SCIENTISTS													
TOTAL....................	63,749	55,373	42,595	12,778	3,148	2,085	1,063	811	657	544	2,607	90	519
SEX													
MEN..................	52,442	46,729	36,125	10,604	1,962	1,294	668	573	290	120	2,276	55	437
WOMEN................	11,307	8,644	6,470	2,174	1,186	791	395	238	367	424	331	35	82
RACE													
WHITE................	57,643	50,004	38,557	11,447	2,879	1,978	901	684	544	509	2,467	88	468
BLACK................	1,587	1,321	952	369	80	32	48	68	38	16	51	2	11
AM.INDIAN/ALSKN NATIVE	135	132	132	*	2	*	2	1	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	3,269	2,954	2,315	639	111	29	82	28	58	12	72	*	34
OTHER................	38	38	21	17	*	*	*	*	*	*	*	*	*
NO REPORT............	1,077	924	618	306	76	46	30	30	17	7	17	*	6
ECONOMISTS													
TOTAL....................	18,107	16,319	12,971	3,348	521	357	164	118	82	112	830	2	123
SEX													
MEN..................	16,509	15,006	11,828	3,178	412	263	149	111	67	44	746	*	123
WOMEN................	1,598	1,313	1,143	170	109	94	15	7	15	68	84	2	*
RACE													
WHITE................	16,067	14,387	11,356	3,031	518	354	164	111	43	99	784	2	123
BLACK................	319	285	220	65	*	*	*	5	*	*	29	*	*
AM.INDIAN/ALSKN NATIVE	60	60	60	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	1,347	1,283	1,110	173	*	*	*	2	39	6	17	*	*
OTHER................	17	17	*	17	*	*	*	*	*	*	*	*	*
NO REPORT............	297	287	225	62	3	3	*	*	*	7	*	*	*
SOCIOLOGISTS/ANTHRO.													
TOTAL....................	13,426	10,899	8,597	2,302	924	667	257	233	305	191	754	*	120
SEX													
MEN..................	9,462	7,994	6,352	1,642	441	329	112	131	170	7	635	*	84
WOMEN................	3,964	2,905	2,245	660	483	338	145	102	135	184	119	*	36
RACE													
WHITE................	12,326	10,063	7,954	2,109	838	640	198	175	252	178	700	*	120
BLACK................	436	322	207	115	50	22	28	6	31	7	20	*	*
AM.INDIAN/ALSKN NATIVE	34	31	31	*	2	*	2	1	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	450	380	346	34	15	3	12	21	11	6	17	*	*
OTHER................	19	19	19	*	*	*	*	*	*	*	*	*	*
NO REPORT............	161	84	40	44	19	2	17	30	11	*	17	*	*
OTHER SOCIAL SCIENTISTS													
TOTAL....................	32,216	28,155	21,027	7,128	1,703	1,061	642	460	270	241	1,023	88	276
SEX													
MEN..................	26,471	23,729	17,945	5,784	1,109	702	407	331	53	69	895	55	230
WOMEN................	5,745	4,426	3,082	1,344	594	359	235	129	217	172	128	33	46
RACE													
WHITE................	29,250	25,554	19,247	6,307	1,523	984	539	398	249	232	983	86	225
BLACK................	832	714	525	189	30	10	20	57	7	9	2	2	11
AM.INDIAN/ALSKN NATIVE	41	41	41	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	1,472	1,291	859	432	96	26	70	5	8	*	38	*	34
OTHER................	2	2	2	*	*	*	*	*	*	*	*	*	*
NO REPORT............	619	553	353	200	54	41	13	*	6	*	*	*	6
ENGINEERS													
TOTAL....................	63,786	59,730	54,662	5,068	1,490	1,199	291	325	271	185	1,222	16	547
SEX													
MEN..................	62,652	58,718	53,690	5,028	1,453	1,167	286	298	257	167	1,215	13	531
WOMEN................	1,134	1,012	972	40	37	32	5	27	14	18	7	3	16
RACE													
WHITE................	51,628	48,226	44,123	4,103	1,382	1,107	275	125	216	98	1,098	16	467
BLACK................	415	410	379	31	*	*	*	*	*	3	*	*	2
AM.INDIAN/ALSKN NATIVE	39	39	28	11	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	10,816	10,247	9,645	602	34	32	2	200	55	84	124	*	72
OTHER................	3	3	3	*	*	*	*	*	*	*	*	*	*
NO REPORT............	885	805	484	321	74	60	14	*	*	*	*	*	6
AERO/ASTRO ENGINEERS													
TOTAL....................	3,724	3,608	3,293	315	76	62	14	*	2	*	1	*	37
SEX													
MEN..................	3,651	3,538	3,223	315	76	62	14	*	*	*	*	*	37
WOMEN................	73	70	70	*	*	*	*	*	2	*	1	*	*
RACE													
WHITE................	3,153	3,052	2,778	274	76	62	14	*	2	*	1	*	22
BLACK................	21	21	13	8	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	1	1	1	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	497	482	482	*	*	*	*	*	*	*	*	*	15
OTHER................	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT............	52	52	19	33	*	*	*	*	*	*	*	*	*

* NO CASES REPORTED

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TABLE B-4. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, SEX, RACE, AND EMPLOYMENT STATUS: 1983
CONTINUED

FIELD, SEX, AND RACE	TOTAL	EMPLOYED FULL-TIME TOTAL	EMPLOYED FULL-TIME SCI/ ENG.	EMPLOYED FULL-TIME OTHER/ UNKNOWN FIELD	EMPLOYED PART-TIME TOTAL	EMPLOYED PART-TIME SCI/ ENG.	EMPLOYED PART-TIME OTHER/ UNKNOWN FIELD	POST-DOC-TORAL	UNEMP/ SEEKING EMP.	UNEMP/ NOT SEEKING EMP.	RE-TIRED	OTHER	NO REPORT
CHEMICAL ENGINEERS													
TOTAL....................	7,713	6,838	5,979	859	107	31	76	47	161	60	439	*	61
SEX													
MEN....................	7,600	6,745	5,893	852	105	29	76	45	155	54	439	*	57
WOMEN..................	113	93	86	7	2	2	*	2	6	6	*	*	4
RACE													
WHITE..................	5,919	5,244	4,557	687	93	31	62	47	112	4	359	*	60
BLACK..................	16	13	13	*	*	*	*	*	*	3	*	*	*
AM.INDIAN/ALSKN NATIVE	2	2	2	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	1,685	1,502	1,389	113	*	*	*	*	49	53	80	*	1
OTHER..................	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT..............	91	77	18	59	14	*	14	*	*	*	*	*	*
CIVIL ENGINEERS													
TOTAL....................	5,504	5,087	4,785	302	139	106	33	91	*	3	181	*	3
SEX													
MEN....................	5,429	5,015	4,716	299	139	106	33	91	*	*	181	*	3
WOMEN..................	75	72	69	3	*	*	*	*	*	3	*	*	*
RACE													
WHITE..................	4,371	4,061	3,772	289	116	83	33	13	*	*	181	*	*
BLACK..................	24	24	24	*	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	1,065	958	945	13	23	23	*	78	*	3	*	*	3
OTHER..................	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT..............	44	44	44	*	*	*	*	*	*	*	*	*	*
ELEC./ELECTRON. ENGINEERS													
TOTAL....................	13,081	12,345	11,125	1,220	314	283	31	37	37	23	147	*	178
SEX													
MEN....................	12,843	12,130	10,911	1,219	296	267	29	34	37	23	147	*	176
WOMEN..................	238	215	214	1	18	16	2	3	*	*	*	*	2
RACE													
WHITE..................	10,602	9,970	9,049	921	306	277	29	34	37	*	132	*	123
BLACK..................	75	75	72	3	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	2,184	2,082	1,892	190	8	6	2	3	*	23	15	*	53
OTHER..................	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT..............	220	218	112	106	*	*	*	*	*	*	*	*	2
MATERIALS SCI. ENGINEERS													
TOTAL....................	7,596	7,072	6,699	373	212	168	44	138	2	44	104	*	24
SEX													
MEN....................	7,432	6,935	6,571	364	206	162	44	124	*	43	102	*	22
WOMEN..................	164	137	128	9	6	6	*	14	2	1	2	*	2
RACE													
WHITE..................	6,249	5,847	5,495	352	209	165	44	21	*	44	104	*	24
BLACK..................	18	18	18	*	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	16	16	7	9	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	1,244	1,122	1,112	10	3	3	*	117	2	*	*	*	*
OTHER..................	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT..............	69	69	67	2	*	*	*	*	*	*	*	*	*
MECHANICAL ENGINEERS													
TOTAL....................	5,923	5,465	4,948	517	192	159	33	*	46	33	119	*	68
SEX													
MEN....................	5,869	5,415	4,900	515	188	155	33	*	46	33	119	*	68
WOMEN..................	54	50	48	2	4	4	*	*	*	*	*	*	*
RACE													
WHITE..................	4,640	4,190	3,693	497	192	159	33	*	46	33	119	*	68
BLACK..................	91	91	88	3	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	1,157	1,157	1,140	17	*	*	*	*	*	*	*	*	*
OTHER..................	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT..............	27	27	27	*	*	*	*	*	*	*	*	*	*
NUCLEAR ENGINEERS													
TOTAL....................	2,331	2,314	2,220	94	13	13	*	2	2	*	*	*	*
SEX													
MEN....................	2,299	2,286	2,193	93	13	13	*	*	*	*	*	*	*
WOMEN..................	32	28	27	1	*	*	*	2	2	*	*	*	*
RACE													
WHITE..................	1,884	1,869	1,825	44	13	13	*	*	2	*	*	*	*
BLACK..................	9	9	9	*	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	382	380	330	50	*	*	*	2	*	*	*	*	*
OTHER..................	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT..............	56	56	56	*	*	*	*	*	*	*	*	*	*
SYSTEMS DESIGN ENGINEERS													
TOTAL....................	3,962	3,794	3,521	273	97	97	*	*	*	3	*	*	68
SEX													
MEN....................	3,854	3,691	3,428	263	97	97	*	*	*	*	*	*	66
WOMEN..................	108	103	93	10	*	*	*	*	*	3	*	*	2
RACE													
WHITE..................	3,539	3,374	3,107	267	97	97	*	*	*	*	*	*	68
BLACK..................	21	21	21	*	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	6	6	4	2	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	335	332	328	4	*	*	*	*	*	3	*	*	*
OTHER..................	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT..............	61	61	61	*	*	*	*	*	*	*	*	*	*
OTHER ENGINEERS													
TOTAL....................	13,952	13,207	12,092	1,115	340	280	60	10	21	19	231	16	108
SEX													
MEN....................	13,675	12,963	11,855	1,108	333	276	57	4	19	14	227	13	102
WOMEN..................	277	244	237	7	7	4	3	6	2	5	4	3	6
RACE													
WHITE..................	11,263	10,619	9,847	772	280	220	60	10	17	17	202	16	102
BLACK..................	140	138	121	17	*	*	*	*	*	*	*	*	2
AM.INDIAN/ALSKN NATIVE	14	14	14	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	2,267	2,232	2,027	205	*	*	*	*	4	2	29	*	*
OTHER..................	3	3	3	*	*	*	*	*	*	*	*	*	*
NO REPORT..............	265	201	80	121	60	60	*	*	*	*	*	*	4

* NO CASES REPORTED

SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE B-4A. NUMBER OF HISPANIC DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, SEX, AND EMPLOYMENT STATUS: 1983

FIELD AND SEX	TOTAL	EMPLOYED FULL-TIME			EMPLOYED PART-TIME			POST-DOC-TORAL	UNEMP/ SEEKING EMP.	UNEMP/ NOT SEEKING EMP.	RE-TIRED	OTHER	NO REPORT
		TOTAL	SCI/ ENG.	OTHER/ UNKNOWN FIELD	TOTAL	SCI/ ENG.	OTHER/ UNKNOWN FIELD						
ALL FIELDS													
TOTAL....................	5,646	4,908	4,265	643	187	154	33	270	66	60	56	24	75
MEN....................	4,856	4,343	3,784	559	118	99	19	207	34	34	51	8	61
WOMEN....................	790	565	481	84	69	55	14	63	32	26	5	16	14
SCIENTISTS													
TOTAL....................	4,694	4,065	3,623	442	152	133	19	212	66	60	42	24	73
MEN....................	3,925	3,515	3,157	358	85	80	5	151	34	34	37	8	61
WOMEN....................	769	550	466	84	67	53	14	61	32	26	5	16	12
PHYSICAL SCIENTISTS													
TOTAL....................	915	846	725	121	5	5	*	30	7	27	*	*	*
MEN....................	838	794	677	117	*	*	*	22	3	19	*	*	*
WOMEN....................	77	52	48	4	5	5	*	8	4	8	*	*	*
CHEMISTS													
TOTAL....................	693	644	535	109	5	5	*	25	7	12	*	*	*
MEN....................	626	600	495	105	*	*	*	17	3	6	*	*	*
WOMEN....................	67	44	40	4	5	5	*	8	4	6	*	*	*
PHYSICISTS/ASTRONOMERS													
TOTAL....................	222	202	190	12	*	*	*	5	*	15	*	*	*
MEN....................	212	194	182	12	*	*	*	5	*	13	*	*	*
WOMEN....................	10	8	8	*	*	*	*	*	*	2	*	*	*
MATHEMATICAL SCIENTISTS													
TOTAL....................	232	182	179	3	16	13	3	*	*	10	12	*	12
MEN....................	203	163	160	3	8	8	*	*	*	8	12	*	12
WOMEN....................	29	19	19	*	8	5	3	*	*	2	*	*	*
MATHEMATICIANS													
TOTAL....................	223	176	173	3	13	13	*	*	*	10	12	*	12
MEN....................	197	157	154	3	8	8	*	*	*	8	12	*	12
WOMEN....................	26	19	19	*	5	5	*	*	*	2	*	*	*
STATISTICIANS													
TOTAL....................	9	6	6	*	3	*	3	*	*	*	*	*	*
MEN....................	6	6	6	*	*	*	*	*	*	*	*	*	*
WOMEN....................	3	*	*	*	3	*	3	*	*	*	*	*	*
COMPUTER/INFORMATION SPECIALISTS													
TOTAL....................	232	232	232	*	*	*	*	*	*	*	*	*	*
MEN....................	223	223	223	*	*	*	*	*	*	*	*	*	*
WOMEN....................	9	9	9	*	*	*	*	*	*	*	*	*	*
ENVIRONMENTAL SCIENTISTS													
TOTAL....................	210	184	182	2	7	5	2	7	2	3	*	*	7
MEN....................	191	172	170	2	3	3	*	7	2	*	*	*	7
WOMEN....................	19	12	12	*	4	2	2	*	*	3	*	*	*
EARTH SCIENTISTS													
TOTAL....................	160	142	141	1	3	3	*	7	*	3	*	*	5
MEN....................	153	138	137	1	3	3	*	7	*	*	*	*	5
WOMEN....................	7	4	4	*	*	*	*	*	*	3	*	*	*
OCEANOGRAPHERS													
TOTAL....................	20	16	16	*	2	2	*	*	2	*	*	*	*
MEN....................	11	9	9	*	*	*	*	*	2	*	*	*	*
WOMEN....................	9	7	7	*	2	2	*	*	*	*	*	*	*
ATMOSPHERIC SCIENTISTS													
TOTAL....................	30	26	25	1	2	*	2	*	*	*	*	*	2
MEN....................	27	25	24	1	*	*	*	*	*	*	*	*	2
WOMEN....................	3	1	1	*	2	*	2	*	*	*	*	*	*
LIFE SCIENTISTS													
TOTAL....................	1,383	1,105	1,019	86	24	20	4	138	17	20	28	12	39
MEN....................	1,154	946	875	71	12	9	3	108	13	7	25	6	37
WOMEN....................	229	159	144	15	12	11	1	30	4	13	3	6	2
BIOLOGICAL SCIENTISTS													
TOTAL....................	717	547	517	30	17	14	3	110	10	9	*	12	12
MEN....................	587	459	437	22	12	9	3	91	7	*	*	6	12
WOMEN....................	130	88	80	8	5	5	*	19	3	9	*	6	*
AGRICULTURAL SCIENTISTS													
TOTAL....................	316	268	233	35	*	*	*	3	*	*	18	*	27
MEN....................	295	252	221	31	*	*	*	*	*	*	18	*	25
WOMEN....................	21	16	12	4	*	*	*	3	*	*	*	*	2
MEDICAL SCIENTISTS													
TOTAL....................	350	290	269	21	7	6	1	25	7	11	10	*	*
MEN....................	272	235	217	18	*	*	*	17	6	7	7	*	*
WOMEN....................	78	55	52	3	7	6	1	8	1	4	3	*	*
PSYCHOLOGISTS													
TOTAL....................	742	636	552	84	37	34	3	26	18	*	*	12	13
MEN....................	510	473	422	51	21	19	2	7	2	*	*	2	5
WOMEN....................	232	163	130	33	16	15	1	19	16	*	*	10	8
SOCIAL SCIENTISTS													
TOTAL....................	980	880	734	146	63	56	7	11	22	*	2	*	2
MEN....................	806	744	630	114	41	41	*	7	14	*	*	*	*
WOMEN....................	174	136	104	32	22	15	7	4	8	*	2	*	2
ECONOMISTS													
TOTAL....................	337	300	248	52	32	32	*	*	5	*	*	*	*
MEN....................	297	270	218	52	27	27	*	*	*	*	*	*	*
WOMEN....................	40	30	30	*	5	5	*	*	5	*	*	*	*
SOCIOLOGISTS/ANTHRO.													
TOTAL....................	185	163	137	26	4	2	2	7	11	*	*	*	*
MEN....................	141	126	103	23	*	*	*	7	8	*	*	*	*
WOMEN....................	44	37	34	3	4	2	2	*	3	*	*	*	*

* NO CASES REPORTED

TABLE B-4A. NUMBER OF HISPANIC DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, SEX, AND EMPLOYMENT STATUS: 1983
CONTINUED

		EMPLOYED FULL-TIME			EMPLOYED PART-TIME								
FIELD AND SEX	TOTAL	TOTAL	SCI/ ENG.	OTHER/ UNKNOWN FIELD	TOTAL	SCI/ ENG.	OTHER/ UNKNOWN FIELD	POST- DOC- TORAL	UNEMP/ SEEKING EMP.	UNEMP/ NOT SEEKING EMP.	RE- TIRED	OTHER	NO REPORT
OTHER SOCIAL SCIENTISTS													
TOTAL....................	458	417	349	68	27	22	5	4	6	*	2	*	2
MEN....................	368	348	309	39	14	14	*	*	6	*	*	*	*
WOMEN..................	90	69	40	29	13	8	5	4	*	*	2	*	2
ENGINEERS													
TOTAL....................	952	843	642	201	35	21	14	58	*	*	14	*	2
MEN....................	931	828	627	201	33	19	14	56	*	*	14	*	*
WOMEN..................	21	15	15	*	2	2	*	2	*	*	*	*	2
AERO/ASTRO ENGINEERS													
TOTAL....................	3	3	3	*	*	*	*	*	*	*	*	*	*
MEN....................	3	3	3	*	*	*	*	*	*	*	*	*	*
WOMEN..................	*	*	*	*	*	*	*	*	*	*	*	*	*
CHEMICAL ENGINEERS													
TOTAL....................	114	69	63	6	*	*	*	45	*	*	*	*	*
MEN....................	111	66	60	6	*	*	*	45	*	*	*	*	*
WOMEN..................	3	3	3	*	*	*	*	*	*	*	*	*	*
CIVIL ENGINEERS													
TOTAL....................	72	72	72	*	*	*	*	*	*	*	*	*	*
MEN....................	72	72	72	*	*	*	*	*	*	*	*	*	*
WOMEN..................	*	*	*	*	*	*	*	*	*	*	*	*	*
ELEC./ELECTRON. ENGINEERS													
TOTAL....................	218	200	116	84	16	2	14	*	*	*	*	*	2
MEN....................	210	196	112	84	14	*	14	*	*	*	*	*	*
WOMEN..................	8	4	4	*	2	2	*	*	*	*	*	*	2
MATERIALS SCI. ENGINEERS													
TOTAL....................	181	158	158	*	*	*	*	9	*	*	14	*	*
MEN....................	178	157	157	*	*	*	*	7	*	*	14	*	*
WOMEN..................	3	1	1	*	*	*	*	2	*	*	*	*	*
MECHANICAL ENGINEERS													
TOTAL....................	78	78	78	*	*	*	*	*	*	*	*	*	*
MEN....................	78	78	78	*	*	*	*	*	*	*	*	*	*
WOMEN..................	*	*	*	*	*	*	*	*	*	*	*	*	*
NUCLEAR ENGINEERS													
TOTAL....................	9	9	9	*	*	*	*	*	*	*	*	*	*
MEN....................	9	9	9	*	*	*	*	*	*	*	*	*	*
WOMEN..................	*	*	*	*	*	*	*	*	*	*	*	*	*
SYSTEMS DESIGN ENGINEERS													
TOTAL....................	149	149	47	102	*	*	*	*	*	*	*	*	*
MEN....................	149	149	47	102	*	*	*	*	*	*	*	*	*
WOMEN..................	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER ENGINEERS													
TOTAL....................	128	105	96	9	19	19	*	4	*	*	*	*	*
MEN....................	121	98	89	9	19	19	*	4	*	*	*	*	*
WOMEN..................	7	7	7	*	*	*	*	*	*	*	*	*	*

* NO CASES REPORTED

SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE B-5. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, AGE, AND TYPE OF EMPLOYER: 1983

FIELD AND AGE	TOTAL EMPL	BUSINESS/INDUSTRY	EDUCATIONAL INSTITUTIONS				HOSPITAL/CLINIC	NONPROFIT ORGS	FEDERAL GOV'T	MILITARY/COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NO REPORT
			TOTAL	4-YEAR COLL/UNIV	2-YEAR COLL	ELEM/SEC. SCHOOL								
ALL FIELDS														
TOTAL	369,320	113,463	196,050	187,554	5,421	3,075	10,435	11,894	25,793	2,090	5,142	2,575	1,002	876
UNDER 30	6,464	2,037	3,558	3,401	16	141	335	339	161	6	26	2	*	*
30-34	48,157	16,432	24,361	23,612	296	453	2,190	1,816	2,102	221	562	323	58	92
35-39	75,963	25,491	36,683	35,188	1,031	464	2,769	2,714	5,544	493	1,388	566	242	73
40-44	80,283	26,059	40,903	38,862	1,470	571	1,863	2,406	6,247	746	1,096	511	298	154
45-49	51,832	15,900	27,598	26,478	716	404	1,089	1,476	4,145	321	805	315	59	124
50-54	39,762	10,656	23,446	22,404	635	407	697	917	2,665	175	646	275	151	134
55-59	31,902	7,451	19,020	18,036	615	369	808	1,041	2,594	59	349	382	133	65
60-64	22,569	6,153	13,271	12,724	363	184	367	700	1,506	69	198	162	34	109
65-69	9,573	2,376	5,754	5,530	149	75	232	365	672	*	64	30	*	80
70 OR OVER	2,562	842	1,306	1,175	129	2	85	120	157	*	8	5	*	39
NO REPORT	253	66	150	144	1	5	*	*	*	*	*	4	27	6
SCIENTISTS														
TOTAL	307,775	78,963	175,730	167,305	5,350	3,075	10,428	9,973	21,950	1,666	5,048	2,286	961	770
UNDER 30	5,318	1,405	3,137	2,980	16	141	335	304	105	4	26	2	*	*
30-34	41,202	11,931	22,350	21,622	275	453	2,190	1,588	1,962	217	530	287	55	92
35-39	63,774	17,984	33,387	31,900	1,023	464	2,769	2,289	4,813	364	1,371	484	242	71
40-44	65,844	17,123	36,814	34,782	1,461	571	1,856	2,081	5,284	640	1,095	499	298	154
45-49	41,703	10,583	23,979	22,861	714	404	1,089	1,261	3,395	196	761	305	54	80
50-54	32,666	7,156	20,668	19,629	632	407	697	691	2,185	175	646	209	151	88
55-59	26,957	5,418	16,891	15,919	603	369	808	751	2,197	44	349	334	100	65
60-64	19,297	4,642	11,853	11,307	362	184	367	577	1,378	26	198	127	34	95
65-69	8,575	1,994	5,363	5,154	134	75	232	311	501	*	64	30	*	80
70 OR OVER	2,202	677	1,138	1,007	129	2	85	120	130	*	8	5	*	39
NO REPORT	237	50	150	144	1	5	*	*	*	*	*	4	27	6
PHYSICAL SCIENTISTS														
TOTAL	63,986	28,748	27,931	26,453	1,134	344	559	1,751	4,307	205	158	88	25	214
UNDER 30	1,446	647	659	653	3	3	*	101	37	*	*	2	*	*
30-34	7,993	4,440	2,720	2,699	21	*	76	263	393	42	4	21	24	10
35-39	10,824	5,316	4,012	3,766	196	50	105	396	853	52	44	22	*	24
40-44	14,022	5,762	6,277	5,813	416	48	179	371	1,259	80	54	10	*	30
45-49	9,948	4,366	4,656	4,442	154	60	72	190	571	21	42	5	1	24
50-54	7,548	3,155	3,801	3,683	104	14	52	84	389	10	8	14	*	35
55-59	5,526	2,311	2,565	2,283	163	119	42	174	426	*	3	*	*	5
60-64	4,334	2,005	1,918	1,821	53	44	33	94	197	*	*	14	*	73
65-69	1,961	576	1,187	1,157	24	6	*	68	114	*	3	*	*	13
70 OR OVER	348	136	134	134	*	*	*	10	68	*	*	*	*	*
NO REPORT	36	34	2	2	*	*	*	*	*	*	*	*	*	*
CHEMISTS														
TOTAL	41,298	22,525	15,037	13,905	901	231	398	818	2,054	95	121	72	1	177
UNDER 30	1,075	615	384	378	3	3	*	54	22	*	*	*	*	*
30-34	5,484	3,607	1,468	1,447	21	*	48	117	209	*	4	21	*	10
35-39	7,038	4,101	2,215	2,025	145	45	105	155	369	27	44	22	*	*
40-44	8,607	4,340	3,376	2,984	349	43	121	117	526	45	42	10	*	30
45-49	5,820	3,056	2,318	2,152	117	49	28	133	222	13	20	5	1	24
50-54	5,285	2,738	2,180	2,063	104	13	51	61	188	10	8	14	*	35
55-59	3,354	1,832	1,121	993	100	28	34	83	276	*	3	*	*	5
60-64	2,993	1,644	1,067	971	52	44	11	73	125	*	*	*	*	73
65-69	1,366	454	848	832	10	6	*	15	49	*	*	*	*	*
70 OR OVER	240	104	58	58	*	*	*	10	68	*	*	*	*	*
NO REPORT	36	34	2	2	*	*	*	*	*	*	*	*	*	*
PHYSICISTS/ASTRONOMERS														
TOTAL	22,688	6,223	12,894	12,548	233	113	161	933	2,253	110	37	16	24	37
UNDER 30	371	32	275	275	*	*	*	47	15	*	*	2	*	*
30-34	2,509	833	1,252	1,252	*	*	28	146	184	42	*	*	24	*
35-39	3,786	1,215	1,797	1,741	51	5	*	241	484	25	*	*	*	24
40-44	5,415	1,422	2,901	2,829	67	5	58	254	733	35	12	*	*	*
45-49	4,128	1,310	2,338	2,290	37	11	44	57	349	8	22	*	*	*
50-54	2,263	417	1,621	1,620	*	1	1	23	201	*	*	*	*	*
55-59	2,172	479	1,444	1,290	63	91	8	91	150	*	*	*	*	*
60-64	1,341	361	851	850	1	*	22	21	72	*	*	14	*	*
65-69	595	122	339	325	14	*	*	53	65	*	3	*	*	13
70 OR OVER	108	32	76	76	*	*	*	*	*	*	*	*	*	*
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
MATHEMATICAL SCIENTISTS														
TOTAL	16,379	2,027	13,244	12,770	318	156	*	211	790	33	21	*	*	53
UNDER 30	295	9	284	284	*	*	*	*	2	*	*	*	*	*
30-34	1,887	230	1,556	1,554	*	2	*	8	93	*	*	*	*	*
35-39	2,983	597	2,151	2,043	71	37	*	32	188	*	*	*	*	15
40-44	4,323	524	3,401	3,222	142	37	*	104	266	20	8	*	*	*
45-49	2,666	242	2,244	2,183	9	52	*	29	100	13	11	*	*	27
50-54	1,690	84	1,527	1,457	52	18	*	17	62	*	*	*	*	*
55-59	1,150	93	1,009	978	27	4	*	9	26	*	2	*	*	11
60-64	817	126	638	621	14	3	*	10	43	*	*	*	*	*
65-69	455	115	330	328	1	1	*	*	10	*	*	*	*	*
70 OR OVER	111	7	102	98	2	2	*	2	*	*	*	*	*	*
NO REPORT	2	*	2	2	*	*	*	*	*	*	*	*	*	*
MATHEMATICIANS														
TOTAL	13,589	1,512	11,365	10,891	318	156	*	106	499	33	21	*	*	53
UNDER 30	245	9	236	236	*	*	*	*	*	*	*	*	*	*
30-34	1,568	162	1,312	1,310	*	2	*	5	89	*	*	*	*	*
35-39	2,454	485	1,825	1,717	71	37	*	3	126	*	*	*	*	15
40-44	3,534	393	2,940	2,761	142	37	*	48	125	20	8	*	*	*
45-49	2,171	127	1,914	1,853	9	52	*	14	65	13	11	*	*	27
50-54	1,409	40	1,301	1,231	52	18	*	17	51	*	*	*	*	*
55-59	1,023	76	927	896	27	4	*	7	*	*	2	*	*	11
60-64	763	126	584	567	14	3	*	10	43	*	*	*	*	*
65-69	316	94	222	220	1	1	*	*	*	*	*	*	*	*
70 OR OVER	104	*	102	98	2	2	*	2	*	*	*	*	*	*
NO REPORT	2	*	2	2	*	*	*	*	*	*	*	*	*	*

* NO CASES REPORTED

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TABLE A-5. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, AGE, AND TYPE OF EMPLOYER: 1983
CONTINUED

FIELD AND AGE	TOTAL EMPL	BUSINESS/ INDUSTRY	EDUCATIONAL INSTITUTIONS TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL	HOSPITAL/ CLINIC	NON-PROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NO REPORT
STATISTICIANS														
TOTAL	2,790	515	1,879	1,879	*	*	*	105	291	*	*	*	*	*
UNDER 30	50	*	48	48	*	*	*	*	2	*	*	*	*	*
30-34	319	68	244	244	*	*	*	3	4	*	*	*	*	*
35-39	529	112	326	326	*	*	*	29	62	*	*	*	*	*
40-44	789	131	461	461	*	*	*	56	141	*	*	*	*	*
45-49	495	115	330	330	*	*	*	15	35	*	*	*	*	*
50-54	281	[illegible]	226	226	*	*	*	*	11	*	*	*	*	*
55-59	127	[illegible]	82	82	*	*	*	2	28	*	*	*	*	*
60-64	54	[illegible]	54	54	*	*	*	*	*	*	*	*	*	*
65-69	139	21	108	108	*	*	*	*	10	*	*	*	*	*
70 OR OVER	7	7	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
COMPUTER/INFORMATION SPECIALISTS														
TOTAL	12,164	6,819	4,031	3,905	96	30	70	345	490	27	229	107	*	46
UNDER 30	236	153	83	83	*	*	*	*	*	*	*	*	*	*
30-34	1,915	1,243	618	618	*	*	3	41	7	3	*	*	*	*
35-39	3,761	2,259	1,200	1,172	22	6	27	73	79	15	81	15	*	12
40-44	2,720	1,561	880	847	33	*	23	45	121	4	25	47	*	14
45-49	1,600	810	444	403	41	*	*	136	149	5	29	22	*	5
50-54	799	346	259	235	*	24	17	5	82	*	52	23	*	15
55-59	561	210	276	276	*	*	*	*	35	*	40	*	*	*
60-64	447	229	192	192	*	*	*	7	17	*	2	*	*	*
65-69	116	7	71	71	*	*	*	38	*	*	*	*	*	*
70 OR OVER	9	1	8	8	*	*	*	*	*	*	*	*	*	*
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ENVIRONMENTAL SCIENTISTS														
TOTAL	16,467	5,154	6,682	6,519	144	19	*	555	3,102	108	633	186	*	47
UNDER 30	205	74	117	117	*	*	*	*	14	*	*	*	*	*
30-34	2,232	817	1,032	1,030	2	*	*	43	201	12	95	32	*	*
35-39	3,518	1,219	1,276	1,271	5	*	*	120	637	29	177	55	*	5
40-44	3,187	1,065	1,132	1,070	62	*	*	155	640	48	109	30	*	8
45-49	2,563	677	1,016	991	17	8	*	104	635	5	91	27	*	8
50-54	1,825	441	955	917	27	11	*	36	320	*	57	8	*	8
55-59	1,123	243	472	464	8	*	*	32	322	*	54	*	*	*
60-64	1,261	345	515	492	23	*	*	51	286	14	14	34	*	2
65-69	391	154	123	123	*	*	*	14	66	*	34	*	*	*
70 OR OVER	162	79	44	44	*	*	*	*	21	*	2	*	*	16
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
EARTH SCIENTISTS														
TOTAL	12,523	4,596	4,658	4,497	142	19	*	271	3,176	46	552	185	*	39
UNDER 30	133	74	59	59	*	*	*	*	*	*	*	*	*	*
30-34	1,560	760	556	554	2	*	*	4	147	*	61	32	*	*
35-39	2,508	1,090	718	715	3	*	*	24	454	11	151	55	*	5
40-44	2,392	922	765	703	62	*	*	100	428	35	104	30	*	8
45-49	1,971	563	830	805	17	8	*	63	400	*	89	26	*	*
50-54	1,595	422	823	785	27	11	*	22	260	*	52	8	*	8
55-59	913	235	378	370	8	*	*	20	228	*	52	*	*	*
60-64	968	326	403	380	23	*	*	24	172	*	7	34	*	2
65-69	357	154	89	89	*	*	*	14	66	*	34	*	*	*
70 OR OVER	126	50	37	37	*	*	*	*	21	*	2	*	*	16
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OCEANOGRAPHERS														
TOTAL	1,742	217	1,082	1,080	2	*	*	95	274	8	57	1	*	8
UNDER 30	19	*	19	19	*	*	*	*	*	*	*	*	*	*
30-34	367	47	280	280	*	*	*	3	8	*	29	*	*	*
35-39	405	47	230	228	2	*	*	43	76	*	9	*	*	*
40-44	405	44	266	266	*	*	*	16	66	8	5	*	*	*
45-49	273	39	128	128	*	*	*	19	76	*	2	1	*	8
50-54	82	8	49	49	*	*	*	*	20	*	5	*	*	*
55-59	89	*	64	64	*	*	*	7	18	*	*	*	*	*
60-64	60	11	25	25	*	*	*	7	10	*	7	*	*	*
65-69	14	*	14	14	*	*	*	*	*	*	*	*	*	*
70 OR OVER	28	21	7	7	*	*	*	*	*	*	*	*	*	*
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ATMOSPHERIC SCIENTISTS														
TOTAL	2,202	341	942	942	*	*	*	189	652	54	24	*	*	*
UNDER 30	53	*	39	39	*	*	*	*	14	*	*	*	*	*
30-34	305	10	196	196	*	*	*	36	46	12	5	*	*	*
35-39	605	82	328	328	*	*	*	53	107	18	17	*	*	*
40-44	390	99	101	101	*	*	*	39	146	5	*	*	*	*
45-49	319	75	58	58	*	*	*	22	159	5	*	*	*	*
50-54	148	11	83	83	*	*	*	14	40	*	*	*	*	*
55-59	121	8	30	30	*	*	*	5	76	*	2	*	*	*
60-64	233	48	87	87	*	*	*	20	64	14	*	*	*	*
65-69	20	*	20	20	*	*	*	*	*	*	*	*	*	*
70 OR OVER	8	8	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
LIFE SCIENTISTS														
TOTAL	92,802	16,444	58,906	57,315	1,287	304	3,606	3,258	7,771	728	1,304	406	158	221
UNDER 30	1,621	245	1,104	1,090	10	4	108	101	52	*	11	*	*	*
30-34	13,167	2,280	8,571	8,475	88	8	537	754	788	58	118	25	*	36
35-39	19,398	3,993	11,975	11,525	328	122	868	657	1,312	230	285	56	7	15
40-44	19,660	3,751	12,080	11,780	232	68	714	605	1,787	260	223	157	12	71
45-49	12,009	2,041	7,321	7,024	251	46	575	457	1,248	77	220	12	47	11
50-54	9,726	1,590	6,465	6,312	133	20	209	171	930	47	207	27	55	25
55-59	8,601	1,089	5,646	5,550	62	26	368	249	940	44	121	81	37	26
60-64	5,594	848	3,785	3,673	102	10	145	167	499	12	92	33	*	13
65-69	2,402	425	1,648	1,581	67	*	54	66	178	*	21	10	*	*
70 OR OVER	581	166	290	276	14	*	28	31	37	*	6	5	*	18
NO REPORT	43	16	21	21	*	*	*	*	*	*	*	*	*	6

* NO CASES REPORTED

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TABLE B-5. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, AGE, AND TYPE OF EMPLOYER: 1983
CONTINUED

FIELD AND AGE	TOTAL EMPL	BUSINESS/ INDUSTRY	EDUCATIONAL INSTITUTIONS TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL	HOSPITAL/ CLINIC	NON-PROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NO REPORT
BIOLOGICAL SCIENTISTS														
TOTAL	55,205	7,730	38,046	36,780	1,025	241	1,296	2,344	4,622	214	591	170	91	101
UNDER 30	1,197	138	888	878	10	*	29	101	30	*	11	*	*	*
30-34	8,929	1,369	6,009	5,924	78	7	250	573	602	19	71	22	*	14
35-39	11,873	2,054	7,981	7,593	266	122	354	429	888	47	91	29	*	*
40-44	11,790	1,612	8,052	7,836	176	40	200	448	1,176	98	120	48	*	36
45-49	6,737	814	4,622	4,369	224	29	161	325	663	29	123	*	*	*
50-54	5,305	626	3,901	3,757	131	13	100	129	419	14	33	4	54	25
55-59	4,863	517	3,379	3,316	39	24	128	182	489	7	68	50	37	6
60-64	2,964	375	2,111	2,030	75	6	45	91	258	*	60	17	*	7
65-69	1,249	170	930	918	12	*	17	45	73	*	14	*	*	*
70 OR OVER	277	48	165	151	14	*	12	21	24	*	*	*	*	7
NO REPORT	21	7	8	8	*	*	*	*	*	*	*	*	*	6
AGRICULTURAL SCIENTISTS														
TOTAL	14,536	3,583	8,189	8,036	132	21	5	305	2,036	*	259	36	58	65
UNDER 30	144	23	100	100	*	*	*	*	21	*	*	*	*	*
30-34	1,571	483	940	940	*	*	*	68	46	*	34	*	*	*
35-39	2,471	759	1,290	1,248	42	*	2	73	234	*	86	*	7	*
40-44	3,097	1,029	1,505	1,445	39	21	*	43	416	*	23	36	12	33
45-49	2,086	493	1,029	1,003	26	*	3	52	420	*	39	*	39	11
50-54	1,677	301	989	989	*	*	*	*	350	*	37	*	*	*
55-59	1,566	149	1,031	1,022	9	*	*	39	309	*	23	*	*	15
60-64	1,263	157	883	867	16	*	*	23	184	*	10	*	*	6
65-69	564	143	378	378	*	*	*	7	29	*	7	*	*	*
70 OR OVER	93	42	44	44	*	*	*	*	7	*	*	*	*	*
NO REPORT	4	4	*	*	*	*	*	*	*	*	*	*	*	*
MEDICAL SCIENTISTS														
TOTAL	23,061	5,131	12,671	12,499	130	42	2,305	609	1,113	514	454	200	9	55
UNDER 30	280	84	116	112	*	4	79	*	1	*	*	*	*	*
30-34	2,667	428	1,622	1,611	10	1	287	113	140	39	13	3	*	22
35-39	5,054	1,180	2,704	2,684	20	*	512	155	170	183	108	27	*	15
40-44	4,773	1,110	2,523	2,499	17	7	514	114	195	162	80	73	*	2
45-49	3,186	734	1,670	1,652	1	17	411	80	165	48	58	12	8	*
50-54	2,744	663	1,575	1,566	2	7	109	42	161	33	137	23	1	*
55-59	2,172	423	1,236	1,220	14	2	240	28	142	37	30	31	*	5
60-64	1,367	316	791	776	11	4	100	53	57	12	22	16	*	*
65-69	589	112	340	285	55	*	37	14	76	*	*	10	*	*
70 OR OVER	211	76	81	81	*	*	16	10	6	*	6	5	*	11
NO REPORT	18	5	13	13	*	*	*	*	*	*	*	*	*	*
PSYCHOLOGISTS														
TOTAL	46,645	13,020	22,182	19,377	951	1,854	6,042	1,773	1,191	188	1,250	898	*	101
UNDER 30	913	166	431	294	3	134	227	70	*	4	15	*	*	*
30-34	7,708	1,986	3,451	2,997	55	399	1,546	240	64	55	168	171	*	27
35-39	10,979	3,043	4,760	4,329	242	189	1,734	529	404	6	336	167	*	*
40-44	8,250	2,580	3,724	3,279	185	260	879	315	175	91	274	189	*	23
45-49	5,704	1,621	2,972	2,640	123	209	420	194	96	32	257	107	*	5
50-54	4,466	1,091	2,511	2,145	98	268	419	190	82	*	75	95	*	3
55-59	4,409	1,139	2,379	2,055	109	215	398	98	190	*	80	108	*	17
60-64	2,576	811	1,288	1,135	43	110	184	44	155	*	45	44	*	5
65-69	1,178	407	494	400	29	65	178	45	25	*	*	13	*	16
70 OR OVER	439	176	153	89	64	*	57	48	*	*	*	*	*	5
NO REPORT	23	*	19	14	*	5	*	*	*	*	*	4	*	*
SOCIAL SCIENTISTS														
TOTAL	55,332	6,751	42,754	40,966	1,420	368	151	2,080	4,299	377	1,453	601	778	88
UNDER 30	602	111	459	459	*	*	*	32	*	*	*	*	*	*
30-34	6,300	935	4,402	4,249	109	44	28	239	416	47	145	38	31	19
35-39	12,311	1,557	8,013	7,794	159	60	35	482	1,340	32	448	169	235	*
40-44	13,682	1,880	9,320	8,771	391	158	61	486	1,036	137	402	66	286	8
45-49	7,213	836	5,326	5,178	119	29	22	151	596	43	111	132	6	*
50-54	6,612	449	5,150	4,880	218	52	*	188	320	118	247	42	96	2
55-59	5,587	333	4,544	4,305	234	5	*	189	258	*	49	145	63	6
60-64	4,268	238	3,517	3,373	127	17	5	204	221	*	45	2	34	2
65-69	2,072	310	1,510	1,494	13	3	*	80	108	*	6	7	*	51
70 OR OVER	552	112	407	358	49	*	*	29	4	*	*	*	*	*
NO REPORT	133	*	106	105	1	*	*	*	*	*	*	*	27	*
ECONOMISTS														
TOTAL	16,958	2,779	11,362	11,264	98	*	15	219	1,692	5	141	92	617	36
UNDER 30	379	111	268	268	*	*	*	*	*	*	*	*	*	*
30-34	1,942	390	1,330	1,330	*	*	15	*	177	*	*	3	27	*
35-39	3,496	415	2,142	2,142	*	*	*	26	681	*	28	*	204	*
40-44	3,709	739	2,171	2,160	11	*	*	91	341	*	59	41	267	*
45-49	1,879	313	1,313	1,304	9	*	*	25	195	*	*	27	6	*
50-54	1,521	210	1,123	1,096	27	*	*	3	118	5	29	*	33	*
55-59	1,756	200	1,359	1,327	32	*	*	55	55	*	*	16	63	*
60-64	1,293	186	970	970	*	*	*	17	80	*	21	*	17	2
65-69	841	156	597	595	2	*	*	2	43	*	4	5	*	34
70 OR OVER	140	51	87	70	17	*	*	*	2	*	*	*	*	*
NO REPORT	2	*	2	2	*	*	*	*	*	*	*	*	*	*
SOCIOLOGISTS/ANTHRO.														
TOTAL	12,056	801	10,369	9,841	443	85	37	431	121	27	163	46	53	8
UNDER 30	66	*	66	66	*	*	*	*	*	*	*	*	*	*
30-34	1,260	179	957	890	67	*	*	52	67	*	2	3	*	*
35-39	2,191	136	1,796	1,749	40	7	32	120	*	*	81	*	26	*
40-44	3,069	293	2,659	2,553	61	45	*	37	35	27	*	*	10	8
45-49	1,555	96	1,337	1,226	82	29	*	76	10	*	5	31	*	*
50-54	1,176	34	1,070	999	67	4	*	36	*	*	32	4	*	*
55-59	1,389	4	1,278	1,190	88	*	*	73	*	*	26	8	*	*
60-64	869	*	796	781	15	*	5	29	5	*	17	*	17	*
65-69	382	55	319	317	2	*	*	4	4	*	*	*	*	*
70 OR OVER	99	4	91	70	21	*	*	4	*	*	*	*	*	*
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*	*

* NO CASES REPORTED

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TABLE B-5. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, AGE, AND TYPE OF EMPLOYER: 1983
CONTINUED

FIELD AND AGE	TOTAL EMPL	BUSINESS/ INDUSTRY	EDUCATIONAL INSTITUTIONS				HOSPITAL/ CLINIC	NON-PROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NO REPORT
			TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL								
OTHER SOCIAL SCIENTISTS														
TOTAL	30,318	3,171	21,023	19,861	879	283	99	1,430	2,486	345	1,149	463	108	44
UNDER 30	157	*	125	125	*	*	*	32	*	*	*	*	*	*
30-34	3,098	366	2,115	2,029	42	44	13	187	172	47	143	32	4	19
35-39	6,624	1,006	4,075	3,903	119	53	3	336	659	32	339	169	5	*
40-44	6,904	848	4,490	4,058	319	113	61	358	660	110	343	25	9	*
45-49	3,779	417	2,676	2,648	28	*	22	50	391	43	106	74	*	*
50-54	3,915	205	2,957	2,785	124	48	*	149	282	113	106	38	63	2
55-59	2,442	121	1,907	1,788	114	5	*	61	203	*	23	121	*	6
60-64	2,106	52	1,751	1,622	112	17	*	158	136	*	7	2	*	*
65-69	849	99	594	582	9	3	*	74	61	*	2	2	*	17
70 OR OVER	313	57	229	218	11	*	*	25	2	*	*	*	*	*
NO REPORT	131	*	104	103	1	*	*	*	*	*	*	*	27	*
ENGINEERS														
TOTAL	61,545	34,500	20,320	20,249	71	*	7	1,921	3,843	424	94	289	41	106
UNDER 30	1,146	632	421	421	*	*	*	35	56	2	*	*	*	*
30-34	6,955	4,501	2,011	1,990	21	*	*	228	140	4	32	36	3	*
35-39	12,189	7,507	3,296	3,288	8	*	*	425	731	129	17	82	*	2
40-44	14,439	8,936	4,089	4,080	9	*	7	325	963	106	1	12	*	*
45-49	10,129	5,317	3,619	3,617	2	*	*	215	750	125	44	10	5	44
50-54	7,096	3,500	2,778	2,775	3	*	*	226	480	*	*	66	*	46
55-59	4,945	2,033	2,129	2,117	12	*	*	290	397	15	*	48	33	*
60-64	3,272	1,511	1,418	1,417	1	*	*	123	128	43	*	35	*	14
65-69	998	382	391	376	15	*	*	54	171	*	*	*	*	*
70 OR OVER	360	165	168	168	*	*	*	*	27	*	*	*	*	*
NO REPORT	16	16	*	*	*	*	*	*	*	*	*	*	*	*
AERO/ASTRO ENGINEERS														
TOTAL	3,684	1,928	865	865	*	*	*	305	511	74	*	1	*	*
UNDER 30	112	112	*	*	*	*	*	*	*	*	*	*	*	*
30-34	391	147	195	195	*	*	*	36	13	*	*	*	*	*
35-39	796	448	74	74	*	*	*	81	193	*	*	*	*	*
40-44	631	378	104	104	*	*	*	*	141	8	*	*	*	*
45-49	711	281	190	190	*	*	*	57	117	66	*	*	*	*
50-54	399	180	83	83	*	*	*	89	47	*	*	*	*	*
55-59	376	181	153	153	*	*	*	42	*	*	*	*	*	*
60-64	234	182	51	51	*	*	*	*	*	*	*	1	*	*
65-69	34	19	15	15	*	*	*	*	*	*	*	*	*	*
70 OR OVER	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
CHEMICAL ENGINEERS														
TOTAL	6,992	4,708	1,722	1,722	*	*	*	202	174	48	*	*	*	58
UNDER 30	368	141	225	225	*	*	*	*	*	2	*	*	*	*
30-34	977	664	222	222	*	*	*	78	13	*	*	*	*	*
35-39	1,593	1,336	211	211	*	*	*	*	*	46	*	*	*	*
40-44	1,248	946	179	179	*	*	*	62	61	*	*	*	*	*
45-49	1,257	618	544	544	*	*	*	*	51	*	*	*	*	44
50-54	586	427	98	98	*	*	*	27	34	*	*	*	*	*
55-59	471	333	138	138	*	*	*	*	*	*	*	*	*	*
60-64	428	274	90	90	*	*	*	35	15	*	*	*	*	14
65-69	50	35	15	15	*	*	*	*	*	*	*	*	*	*
70 OR OVER	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	14	14	*	*	*	*	*	*	*	*	*	*	*	*
CIVIL ENGINEERS														
TOTAL	5,317	1,895	3,138	3,121	17	*	*	16	79	42	17	129	1	*
UNDER 30	87	*	85	85	*	*	*	*	2	*	*	*	*	*
30-34	353	216	126	126	*	*	*	*	1	*	7	2	1	*
35-39	1,210	501	658	658	*	*	*	16	2	*	9	24	*	*
40-44	1,227	421	736	736	*	*	*	*	41	22	1	6	*	*
45-49	711	322	374	372	2	*	*	*	*	5	*	10	*	*
50-54	857	280	498	498	*	*	*	*	13	*	*	66	*	*
55-59	529	34	474	474	*	*	*	*	6	15	*	*	*	*
60-64	224	93	110	110	*	*	*	*	*	*	*	21	*	*
65-69	45	15	30	15	15	*	*	*	*	*	*	*	*	*
70 OR OVER	74	13	47	47	*	*	*	*	14	*	*	*	*	*
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ELEC./ELECTRON. ENGINEERS														
TOTAL	12,696	7,615	3,960	3,959	1	*	*	218	776	65	47	15	*	*
UNDER 30	96	91	5	5	*	*	*	*	*	*	*	*	*	*
30-34	1,337	1,063	213	213	*	*	*	22	36	*	3	*	*	*
35-39	2,779	1,520	877	877	*	*	*	135	247	*	*	*	*	*
40-44	3,545	2,454	820	820	*	*	*	26	223	22	*	*	*	*
45-49	1,814	1,076	624	624	*	*	*	*	70	*	44	*	*	*
50-54	1,178	696	360	360	*	*	*	8	114	*	*	*	*	*
55-59	1,062	438	565	565	*	*	*	*	44	*	*	15	*	*
60-64	712	231	409	408	1	*	*	14	15	43	*	*	*	*
65-69	85	*	58	58	*	*	*	13	14	*	*	*	*	*
70 OR OVER	88	46	29	29	*	*	*	*	13	*	*	*	*	*
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*	*
MATERIALS SCI. ENGINEERS														
TOTAL	7,422	4,893	1,820	1,820	*	*	*	237	472	*	*	*	*	*
UNDER 30	103	64	4	4	*	*	*	35	*	*	*	*	*	*
30-34	1,087	721	323	323	*	*	*	2	41	*	*	*	*	*
35-39	1,073	899	156	156	*	*	*	*	18	*	*	*	*	*
40-44	1,710	1,253	327	327	*	*	*	75	55	*	*	*	*	*
45-49	1,222	702	325	325	*	*	*	31	164	*	*	*	*	*
50-54	985	530	315	315	*	*	*	35	105	*	*	*	*	*
55-59	573	421	61	61	*	*	*	45	46	*	*	*	*	*
60-64	491	212	222	222	*	*	*	14	43	*	*	*	*	*
65-69	131	59	72	72	*	*	*	*	*	*	*	*	*	*
70 OR OVER	45	30	15	15	*	*	*	*	*	*	*	*	*	*
NO REPORT	2	2	*	*	*	*	*	*	*	*	*	*	*	*

* NO CASES REPORTED

TABLE B-5. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, AGE, AND TYPE OF EMPLOYER: 1983
CONTINUED

FIELD AND AGE	TOTAL EMPL	BUS-INESS/ INDUS-TRY	EDUCATIONAL INSTITUTIONS TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL	HOS-PITAL/ CLINIC	NON-PROFIT ORGS	FED-ERAL GOV'T	MILI-TARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NO REPORT
MECHANICAL ENGINEERS														
TOTAL....................	5,637	2,596	2,578	2,560	18	*	*	107	353	23	*	*	*	*
UNDER 30..............	16	10	6	6	*	*	*	*	*	*	*	*	*	*
30-34.................	579	262	315	315	*	*	*	2	*	*	*	*	*	*
35-39.................	1,084	534	356	353	3	*	*	*	94	*	*	*	*	*
40-44.................	1,297	752	454	454	*	*	*	*	68	23	*	*	*	*
45-49.................	1,094	492	470	470	*	*	*	22	110	*	*	*	*	*
50-54.................	884	341	510	507	3	*	*	*	33	*	*	*	*	*
55-59.................	392	42	252	240	12	*	*	83	15	*	*	*	*	*
60-64.................	159	48	111	111	*	*	*	*	*	*	*	*	*	*
65-69.................	109	*	76	76	*	*	*	*	33	*	*	*	*	*
70 OR OVER............	43	15	28	28	*	*	*	*	*	*	*	*	*	*
NO REPORT.............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NUCLEAR ENGINEERS														
TOTAL....................	2,329	1,380	674	674	*	*	*	67	148	*	*	58	2	*
UNDER 30..............	27	27	*	*	*	*	*	*	*	*	*	*	*	*
30-34.................	188	69	83	83	*	*	*	32	2	*	*	*	2	*
35-39.................	517	317	138	138	*	*	*	*	4	*	*	58	*	*
40-44.................	631	442	138	138	*	*	*	*	51	*	*	*	*	*
45-49.................	339	225	92	92	*	*	*	*	22	*	*	*	*	*
50-54.................	169	100	69	69	*	*	*	*	*	*	*	*	*	*
55-59.................	195	80	37	37	*	*	*	22	56	*	*	*	*	*
60-64.................	124	43	55	55	*	*	*	13	13	*	*	*	*	*
65-69.................	91	64	27	27	*	*	*	*	*	*	*	*	*	*
70 OR OVER............	48	13	35	35	*	*	*	*	*	*	*	*	*	*
NO REPORT.............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
SYSTEMS DESIGN ENGINEERS														
TOTAL....................	3,891	2,252	881	881	*	*	*	396	252	88	22	*	*	*
UNDER 30..............	123	79	17	17	*	*	*	*	27	*	*	*	*	*
30-34.................	518	380	87	87	*	*	*	29	*	*	22	*	*	*
35-39.................	815	496	151	151	*	*	*	70	41	57	*	*	*	*
40-44.................	1,083	509	337	337	*	*	*	108	98	31	*	*	*	*
45-49.................	594	326	172	172	*	*	*	86	10	*	*	*	*	*
50-54.................	350	316	2	2	*	*	*	32	*	*	*	*	*	*
55-59.................	229	64	61	61	*	*	*	38	66	*	*	*	*	*
60-64.................	138	69	54	54	*	*	*	5	10	*	*	*	*	*
65-69.................	28	*	*	*	*	*	*	28	*	*	*	*	*	*
70 OR OVER............	13	13	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT.............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER ENGINEERS														
TOTAL....................	13,557	7,153	4,682	4,647	35	*	7	373	1,078	84	8	86	38	48
UNDER 30..............	214	108	79	79	*	*	*	*	27	*	*	*	*	*
30-34.................	1,525	979	447	426	21	*	*	27	34	4	*	34	*	*
35-39.................	2,322	1,356	675	670	5	*	*	123	132	26	8	*	*	2
40-44.................	3,067	1,781	994	985	9	*	7	54	225	*	*	6	*	*
45-49.................	2,387	1,275	828	828	*	*	*	19	206	54	*	*	5	*
50-54.................	1,688	630	843	843	*	*	*	35	134	*	*	*	*	46
55-59.................	1,118	440	388	388	*	*	*	60	164	*	*	33	33	*
60-64.................	762	359	316	316	*	*	*	42	32	*	*	13	*	*
65-69.................	425	190	98	98	*	*	*	13	124	*	*	*	*	*
70 OR OVER............	49	35	14	14	*	*	*	*	*	*	*	*	*	*
NO REPORT.............	*	*	*	*	*	*	*	*	*	*	*	*	*	*

* NO CASES REPORTED

SOURCE: NATIONAL SCIENCE FOUNDATION

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TABLE B-6. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, RACE, AND TYPE OF EMPLOYER: 1983

FIELD AND RACE	TOTAL EMPL.	BUSINESS/INDUSTRY	EDUCATIONAL INSTITUTIONS				HOSPITAL/CLINIC	NON-PROFIT ORGS	FEDERAL GOV'T	MILITARY/COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NO REPORT
			TOTAL	4-YEAR COLL/UNIV	2-YEAR COLL	ELEM/SEC. SCHOOL								
ALL FIELDS														
TOTAL	369,320	113,463	196,050	187,554	5,421	3,075	10,435	11,894	25,793	2,090	5,142	2,575	1,002	876
WHITE	328,455	97,673	176,500	168,878	4,812	2,810	9,470	10,746	23,615	1,975	4,690	2,255	745	706
BLACK	4,940	675	3,329	3,140	125	64	152	202	308	49	74	113	30	16
AM.INDIAN/ALSKN NATIVE	418	69	294	290	*	4	17	*	13	*	12	10	*	3
ASIAN/PACIFIC ISLANDER	29,740	13,431	12,779	12,439	302	38	546	844	1,382	47	262	167	191	91
OTHER	202	76	92	88	4	*	7	5	20	2	*	*	*	*
NO REPORT	5,557	1,539	2,976	2,719	178	79	243	97	455	17	104	30	36	60
SCIENTISTS														
TOTAL	307,775	78,963	175,730	167,305	5,350	3,075	10,428	9,973	21,950	1,666	5,048	2,286	961	770
WHITE	278,722	71,090	159,196	151,559	4,747	2,890	9,463	9,178	20,195	1,559	4,613	2,078	704	646
BLACK	4,538	538	3,132	2,943	125	64	152	167	282	41	74	106	30	16
AM.INDIAN/ALSKN NATIVE	379	51	280	276	*	4	17	*	12	*	12	4	*	3
ASIAN/PACIFIC ISLANDER	19,259	6,133	10,370	10,036	296	38	546	526	1,042	47	245	68	191	91
OTHER	199	76	89	85	4	*	7	5	20	2	*	*	*	*
NO REPORT	4,678	1,075	2,663	2,406	178	79	243	97	399	17	104	30	36	14
PHYSICAL SCIENTISTS														
TOTAL	63,986	28,748	27,931	26,453	1,134	344	559	1,751	4,307	205	158	88	25	214
WHITE	56,521	25,213	24,859	23,556	964	339	457	1,651	3,782	179	127	77	24	152
BLACK	690	183	423	384	37	2	*	8	73	3	*	*	*	*
AM.INDIAN/ALSKN NATIVE	67	4	63	63	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	5,604	2,988	2,034	1,965	69	*	65	92	396	10	29	7	1	62
OTHER	22	21	1	1	*	*	*	*	*	*	*	*	*	*
NO REPORT	1,002	339	551	484	64	3	37	*	56	13	2	4	*	*
CHEMISTS														
TOTAL	41,298	22,525	15,037	13,905	901	231	398	818	2,054	95	121	72	1	177
WHITE	36,282	19,627	13,503	12,539	738	226	334	736	1,739	72	92	61	*	118
BLACK	448	126	277	240	37	2	*	2	41	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	42	4	38	38	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	3,865	2,487	925	863	62	*	27	80	240	10	29	7	1	59
OTHER	21	20	1	1	*	*	*	*	*	*	*	*	*	*
NO REPORT	640	261	291	224	64	3	37	*	34	13	*	4	*	*
PHYSICISTS/ASTRONOMERS														
TOTAL	22,688	6,223	12,794	12,548	133	113	161	933	2,253	110	37	16	24	37
WHITE	20,239	5,506	11,256	11,017	126	113	123	925	2,043	107	35	16	24	34
BLACK	242	57	144	144	*	*	*	6	32	3	*	*	*	*
AM.INDIAN/ALSKN NATIVE	25	*	25	25	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	1,819	501	1,109	1,102	7	*	38	2	156	*	*	*	*	3
OTHER	1	1	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	362	78	260	260	*	*	*	*	22	*	2	*	*	*
MATHEMATICAL SCIENTISTS														
TOTAL	16,379	2,027	13,244	12,770	318	156	*	211	790	33	21	*	*	53
WHITE	14,531	1,709	11,869	11,470	249	150	*	191	676	33	14	*	*	39
BLACK	178	21	139	135	4	*	*	5	13	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	6	2	4	4	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	1,378	273	1,034	980	54	*	*	2	62	*	7	*	*	*
OTHER	2	*	*	*	*	*	*	*	2	*	*	*	*	*
NO REPORT	284	22	198	181	11	6	*	13	37	*	*	*	*	14
MATHEMATICIANS														
TOTAL	13,589	1,512	11,365	10,891	318	156	*	106	499	33	21	*	*	53
WHITE	12,212	1,266	10,307	9,908	249	150	*	89	464	33	14	*	*	39
BLACK	153	19	123	119	4	*	*	2	9	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	4	2	2	2	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	976	203	738	684	54	*	*	2	26	*	7	*	*	*
OTHER	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	244	22	195	178	11	6	*	13	*	*	*	*	*	14
STATISTICIANS														
TOTAL	2,790	515	1,879	1,879	*	*	*	105	291	*	*	*	*	*
WHITE	2,319	443	1,562	1,562	*	*	*	102	212	*	*	*	*	*
BLACK	25	2	16	16	*	*	*	3	4	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	2	*	2	2	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	402	70	296	296	*	*	*	*	36	*	*	*	*	*
OTHER	2	*	*	*	*	*	*	*	2	*	*	*	*	*
NO REPORT	40	*	3	3	*	*	*	*	37	*	*	*	*	*
COMPUTER/INFORMATION SPECIALISTS														
TOTAL	12,164	6,819	4,031	3,905	96	30	70	345	490	27	229	107	*	46
WHITE	11,012	6,098	3,703	3,585	90	28	70	305	465	24	209	92	*	46
BLACK	43	7	25	17	6	2	*	4	7	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	3	3	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	944	578	288	288	*	*	*	36	4	3	20	15	*	*
OTHER	6	2	4	4	*	*	*	*	*	*	*	*	*	*
NO REPORT	156	131	11	11	*	*	*	*	14	*	*	*	*	*
ENVIRONMENTAL SCIENTISTS														
TOTAL	16,467	5,154	6,682	6,519	144	19	*	555	3,102	108	633	186	*	47
WHITE	15,476	4,727	6,334	6,173	144	17	*	521	2,970	108	591	183	*	42
BLACK	33	15	13	11	*	2	*	*	5	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	11	*	1	1	*	*	*	*	8	*	2	*	*	*
ASIAN/PACIFIC ISLANDER	770	351	266	266	*	*	*	34	77	*	34	3	*	5
OTHER	18	6	3	3	*	*	*	*	9	*	*	*	*	*
NO REPORT	159	55	65	65	*	*	*	*	33	*	6	*	*	*
EARTH SCIENTISTS														
TOTAL	12,523	4,596	4,658	4,497	142	19	*	271	2,176	46	552	185	*	39
WHITE	11,733	4,187	4,405	4,246	142	17	*	248	2,109	46	522	182	*	34
BLACK	29	15	9	7	*	2	*	*	5	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	9	*	1	1	*	*	*	*	6	*	2	*	*	*
ASIAN/PACIFIC ISLANDER	627	333	192	192	*	*	*	23	49	*	22	3	*	5
OTHER	11	6	3	3	*	*	*	*	2	*	*	*	*	*
NO REPORT	114	55	48	48	*	*	*	*	5	*	6	*	*	*
OCEANOGRAPHERS														
TOTAL	1,742	217	1,082	1,080	2	*	*	95	274	8	57	1	*	8
WHITE	1,670	217	1,043	1,041	2	*	*	89	247	8	57	1	*	8
BLACK	2	*	2	2	*	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	61	*	37	37	*	*	*	6	18	*	*	*	*	*
OTHER	7	*	*	*	*	*	*	*	7	*	*	*	*	*
NO REPORT	2	*	*	*	*	*	*	*	2	*	*	*	*	*

* NO CASES REPORTED

TABLE B-6. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, RACE, AND TYPE OF EMPLOYER: 1983
CONTINUED

FIELD AND RACE	TOTAL EMPL	BUSINESS/ INDUSTRY	EDUCATIONAL INSTITUTIONS											
			TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL	HOSPITAL/ CLINIC	NON-PROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NO REPORT
ATMOSPHERIC SCIENTISTS														
TOTAL	2,202	341	942	942	*	*	*	189	652	54	24	*	*	*
WHITE	2,073	323	886	886	*	*	*	184	614	54	12	*	*	*
BLACK	2	*	2	2	*	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALASKN NATIVE	2	*	*	*	*	*	*	*	2	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	82	18	37	37	*	*	*	5	10	*	12	*	*	*
OTHER	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	43	*	17	17	*	*	*	*	26	*	*	*	*	*
LIFE SCIENTISTS														
TOTAL	92,802	16,444	58,906	57,315	1,287	304	3,606	3,258	7,771	728	1,304	406	158	221
WHITE	83,378	14,732	52,878	51,318	1,143	225	3,104	2,929	7,228	686	1,190	337	97	197
BLACK	1,142	82	784	747	23	14	43	37	106	14	12	64	*	*
AM.INDIAN/ALASKN NATIVE	84	14	58	58	*	*	10	*	2	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	6,750	1,319	4,288	4,287	60	21	353	286	306	26	89	5	54	24
OTHER	84	40	26	22	4	*	7	*	9	2	*	*	*	*
NO REPORT	1,364	257	872	771	57	44	89	6	120	*	13	*	7	*
BIOLOGICAL SCIENTISTS														
TOTAL	55,205	7,730	38,046	36,780	1,025	241	1,296	2,344	4,622	214	591	170	91	101
WHITE	49,475	6,894	34,183	33,013	906	184	1,138	2,085	4,225	194	544	163	37	92
BLACK	642	26	497	464	20	13	2	18	84	7	6	2	*	*
AM.INDIAN/ALASKN NATIVE	32	2	23	23	*	*	8	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	4,218	702	2,881	2,750	51	*	141	241	222	11	32	5	54	9
OTHER	21	*	12	8	4	*	7	*	*	2	*	*	*	*
NO REPORT	816	106	610	522	44	44	*	*	91	*	9	*	*	*
AGRICULTURAL SCIENTISTS														
TOTAL	14,536	3,583	8,189	8,036	132	21	5	305	2,036	*	259	36	58	65
WHITE	13,432	3,240	7,566	7,452	114	*	3	271	1,973	*	227	36	51	65
BLACK	63	6	39	39	*	*	*	15	3	*	*	*	*	*
AM.INDIAN/ALASKN NATIVE	34	3	27	27	*	*	2	*	2	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	812	281	443	413	9	21	*	19	40	*	29	*	*	*
OTHER	20	2	9	9	*	*	*	*	9	*	*	*	*	*
NO REPORT	175	51	105	96	9	*	*	*	9	*	3	*	7	*
MEDICAL SCIENTISTS														
TOTAL	23,061	5,131	12,671	12,499	130	42	2,305	609	1,113	514	454	200	9	55
WHITE	20,471	4,598	11,209	11,045	123	41	1,963	573	1,030	492	419	138	9	40
BLACK	437	50	248	244	3	1	41	4	19	7	6	62	*	*
AM.INDIAN/ALASKN NATIVE	17	9	8	8	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	1,720	336	1,044	1,044	*	*	212	26	44	15	28	*	*	15
OTHER	43	38	5	5	*	*	*	*	*	*	*	*	*	*
NO REPORT	373	100	157	153	4	*	89	6	20	*	1	*	*	*
PSYCHOLOGISTS														
TOTAL	46,645	13,020	22,182	19,377	951	1,854	6,042	1,773	1,191	188	1,250	898	*	101
WHITE	44,237	12,587	20,961	18,314	877	1,770	5,683	1,651	1,107	157	1,147	854	*	90
BLACK	983	141	578	523	18	37	107	50	35	19	33	12	*	8
AM.INDIAN/ALASKN NATIVE	73	26	35	31	*	4	7	*	2	*	*	*	*	3
ASIAN/PACIFIC ISLANDER	640	90	328	270	41	17	128	28	31	8	19	8	*	*
OTHER	29	5	19	19	*	*	*	5	*	*	*	*	*	*
NO REPORT	683	171	261	220	15	26	117	39	16	4	51	24	*	*
SOCIAL SCIENTISTS														
TOTAL	59,332	6,751	42,754	40,966	1,420	368	151	2,080	4,299	377	1,453	601	778	88
WHITE	53,567	6,024	38,592	36,951	1,280	361	149	1,930	3,967	372	1,335	535	583	80
BLACK	1,469	89	1,170	1,126	37	7	2	63	43	5	29	30	30	8
AM.INDIAN/ALASKN NATIVE	135	2	119	119	*	*	*	*	*	*	10	4	*	*
ASIAN/PACIFIC ISLANDER	3,093	534	2,132	2,060	72	*	*	48	166	*	47	30	136	*
OTHER	38	2	36	36	*	*	*	*	*	*	*	*	*	*
NO REPORT	1,030	100	705	674	31	*	*	39	123	*	32	2	29	*
ECONOMISTS														
TOTAL	16,958	2,779	11,362	11,264	98	*	15	219	1,692	5	141	92	617	36
WHITE	15,016	2,440	10,128	10,030	98	*	15	210	1,515	*	129	76	467	36
BLACK	290	11	232	232	*	*	*	9	13	5	*	*	20	*
AM.INDIAN/ALASKN NATIVE	60	*	60	60	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	1,285	270	774	774	*	*	*	*	85	*	12	16	128	*
OTHER	17	*	17	17	*	*	*	*	*	*	*	*	*	*
NO REPORT	290	58	151	151	*	*	*	*	79	*	*	*	2	*
SOCIOLOGISTS/ANTHRO.														
TOTAL	12,056	801	10,369	9,841	443	85	37	431	121	27	163	46	53	8
WHITE	11,076	778	9,496	8,990	428	78	37	385	117	27	161	35	40	*
BLACK	378	4	329	314	8	7	*	17	*	*	2	8	10	8
AM.INDIAN/ALASKN NATIVE	34	2	32	32	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	416	15	388	381	7	*	*	3	4	*	*	3	3	*
OTHER	19	2	17	17	*	*	*	*	*	*	*	*	*	*
NO REPORT	133	*	107	107	*	*	*	26	*	*	*	*	*	*
OTHER SOCIAL SCIENTISTS														
TOTAL	30,318	3,171	21,023	19,861	879	283	99	1,430	2,486	345	1,149	463	108	44
WHITE	27,475	2,806	18,968	17,931	754	283	97	1,335	2,335	345	1,045	424	76	44
BLACK	801	74	609	580	29	*	2	37	30	*	27	22	*	*
AM.INDIAN/ALASKN NATIVE	41	*	27	27	*	*	*	*	*	*	10	4	*	*
ASIAN/PACIFIC ISLANDER	1,392	249	970	905	65	*	*	45	77	*	35	11	5	*
OTHER	2	*	2	2	*	*	*	*	*	*	*	*	*	*
NO REPORT	607	42	447	416	31	*	*	13	44	*	32	2	27	*
ENGINEERS														
TOTAL	61,545	34,500	20,320	20,249	71	*	7	1,921	3,843	424	94	289	41	106
WHITE	49,733	26,583	17,384	17,319	65	*	7	1,568	3,420	416	77	177	41	60
BLACK	410	137	197	197	*	*	*	35	26	8	*	7	*	*
AM.INDIAN/ALASKN NATIVE	39	18	14	14	*	*	*	*	1	*	*	6	*	*
ASIAN/PACIFIC ISLANDER	10,481	7,298	2,409	2,403	6	*	*	318	340	*	17	99	*	*
OTHER	3	*	3	3	*	*	*	*	*	*	*	*	*	*
NO REPORT	879	464	313	313	*	*	*	*	56	*	*	*	*	46
AERO/ASTRO ENGINEERS														
TOTAL	3,684	1,928	865	865	*	*	*	305	511	74	*	1	*	*
WHITE	3,128	1,626	733	733	*	*	*	226	476	66	*	1	*	*
BLACK	21	*	2	2	*	*	*	*	11	8	*	*	*	*
AM.INDIAN/ALASKN NATIVE	1	*	*	*	*	*	*	*	1	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	482	302	97	97	*	*	*	79	4	*	*	*	*	*
OTHER	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	52	*	33	33	*	*	*	*	19	*	*	*	*	*

* NO CASES REPORTED

TABLE B-6. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, RACE, AND TYPE OF EMPLOYER: 1983
CONTINUED

FIELD AND RACE	TOTAL EMPL	BUSINESS/INDUSTRY	EDUCATIONAL INSTITUTIONS TOTAL	4-YEAR COLL/UNIV	2-YEAR COLL	ELEM/SEC. SCHOOL	HOSPITAL/CLINIC	NON-PROFIT ORGS	FEDERAL GOV'T	MILITARY/COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NO REPORT
CHEMICAL ENGINEERS														
TOTAL....................	6,992	4,788	1,722	1,722	*	*	*	202	174	48	*	*	*	58
WHITE....................	5,384	3,624	1,442	1,442	*	*	*	105	107	48	*	*	*	58
BLACK....................	13	13	*	*	*	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALASKN NATIVE	2	*	2	2	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	1,502	1,060	278	278	*	*	*	97	67	*	*	*	*	*
OTHER....................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT............	91	91	*	*	*	*	*	*	*	*	*	*	*	*
CIVIL ENGINEERS														
TOTAL....................	5,317	1,895	3,138	3,121	17	*	*	16	79	42	17	129	1	*
WHITE....................	4,190	1,250	2,758	2,741	17	*	*	16	34	42	8	81	1	*
BLACK....................	24	9	5	5	*	*	*	*	3	*	*	7	*	*
AM.INDIAN/ALASKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	1,059	636	331	331	*	*	*	*	42	*	9	41	*	*
OTHER....................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT............	44	*	44	44	*	*	*	*	*	*	*	*	*	*
ELEC./ELECTRON. ENGINEERS														
TOTAL....................	12,696	7,615	3,960	3,959	1	*	*	218	776	65	47	15	*	*
WHITE....................	10,310	5,858	3,533	3,532	1	*	*	157	635	65	47	15	*	*
BLACK....................	75	10	60	60	*	*	*	2	3	*	*	*	*	*
AM.INDIAN/ALASKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	2,093	1,606	305	305	*	*	*	59	123	*	*	*	*	*
OTHER....................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT............	218	141	62	62	*	*	*	*	15	*	*	*	*	*
MATERIALS SCI. ENGINEERS														
TOTAL....................	7,422	4,893	1,820	1,820	*	*	*	237	472	*	*	*	*	*
WHITE....................	6,077	3,982	1,391	1,391	*	*	*	237	467	*	*	*	*	*
BLACK....................	18	16	*	*	*	*	*	*	2	*	*	*	*	*
AM.INDIAN/ALASKN NATIVE	16	7	9	9	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	1,242	886	353	353	*	*	*	*	3	*	*	*	*	*
OTHER....................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT............	69	2	67	67	*	*	*	*	*	*	*	*	*	*
MECHANICAL ENGINEERS														
TOTAL....................	5,657	2,596	2,578	2,560	18	*	*	107	353	23	*	*	*	*
WHITE....................	4,382	1,908	2,048	2,036	12	*	*	57	346	23	*	*	*	*
BLACK....................	91	3	88	88	*	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALASKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	1,157	658	442	436	6	*	*	50	7	*	*	*	*	*
OTHER....................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT............	27	27	*	*	*	*	*	*	*	*	*	*	*	*
NUCLEAR ENGINEERS														
TOTAL....................	2,329	1,380	674	674	*	*	*	67	148	*	*	58	2	*
WHITE....................	1,882	1,097	601	601	*	*	*	67	115	*	*	*	2	*
BLACK....................	9	2	*	*	*	*	*	*	7	*	*	*	*	*
AM.INDIAN/ALASKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	382	274	46	46	*	*	*	*	4	*	*	58	*	*
OTHER....................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT............	56	7	27	27	*	*	*	*	22	*	*	*	*	*
SYSTEMS DESIGN ENGINEERS														
TOTAL....................	3,891	2,252	881	881	*	*	*	396	252	88	22	*	*	*
WHITE....................	3,471	2,008	759	759	*	*	*	361	233	88	22	*	*	*
BLACK....................	21	6	5	5	*	*	*	10	*	*	*	*	*	*
AM.INDIAN/ALASKN NATIVE	6	4	2	2	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	332	187	101	101	*	*	*	25	19	*	*	*	*	*
OTHER....................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT............	61	47	14	14	*	*	*	*	*	*	*	*	*	*
OTHER ENGINEERS														
TOTAL....................	13,557	7,153	4,682	4,647	35	*	7	373	1,078	84	8	86	38	48
WHITE....................	10,909	5,230	4,119	4,084	35	*	7	342	1,007	84	*	80	38	2
BLACK....................	138	78	37	37	*	*	*	23	*	*	*	*	*	*
AM.INDIAN/ALASKN NATIVE	14	7	1	1	*	*	*	*	*	*	*	6	*	*
ASIAN/PACIFIC ISLANDER	2,232	1,689	456	456	*	*	*	8	71	*	8	*	*	*
OTHER....................	3	*	3	3	*	*	*	*	*	*	*	*	*	*
NO REPORT............	261	149	66	66	*	*	*	*	*	*	*	*	*	46

* NO CASES REPORTED

SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE B-6A. NUMBER OF EMPLOYED HISPANIC DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, SEX, AND TYPE OF EMPLOYER: 1993

FIELD	TOTAL EMPL.	BUSINESS/ INDUSTRY	EDUCATIONAL INSTITUTIONS TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL	HOSPITAL/ CLINIC	NON-PROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NO REPORT
ALL FIELDS														
TOTAL....................	5,365	1,497	2,798	2,607	143	48	205	197	392	20	95	38	106	17
MEN....................	4,668	1,400	2,366	2,230	129	7	163	162	365	17	90	18	84	3
WOMEN....................	697	97	432	377	14	41	42	35	27	3	5	20	22	14
SCIENTISTS														
TOTAL....................	4,429	966	2,479	2,291	140	48	205	173	337	18	95	38	101	17
MEN....................	3,751	886	2,049	1,916	126	7	163	138	310	15	90	18	79	3
WOMEN....................	678	80	430	375	14	41	42	35	27	3	5	20	22	14
PHYSICAL SCIENTISTS														
TOTAL....................	881	293	461	375	86	*	1	9	113	3	*	*	1	*
MEN....................	816	281	415	333	82	*	1	7	108	3	*	*	1	*
WOMEN....................	65	12	46	42	4	*	*	2	5	*	*	*	*	*
CHEMISTS														
TOTAL....................	674	270	375	289	86	*	*	2	26	*	*	*	1	*
MEN....................	617	259	335	253	82	*	*	*	22	*	*	*	1	*
WOMEN....................	57	11	40	36	4	*	*	2	4	*	*	*	*	*
PHYSICISTS/ASTRONOMERS														
TOTAL....................	207	23	86	86	*	*	1	7	87	3	*	*	*	*
MEN....................	199	22	80	80	*	*	1	7	86	3	*	*	*	*
WOMEN....................	8	1	6	6	*	*	*	*	1	*	*	*	*	*
MATHEMATICAL SCIENTISTS														
TOTAL....................	198	19	171	168	3	*	*	*	5	3	*	*	*	*
MEN....................	171	19	144	141	3	*	*	*	5	3	*	*	*	*
WOMEN....................	27	*	27	27	*	*	*	*	*	*	*	*	*	*
MATHEMATICIANS														
TOTAL....................	189	19	165	162	3	*	*	*	2	3	*	*	*	*
MEN....................	165	19	141	138	3	*	*	*	2	3	*	*	*	*
WOMEN....................	24	*	24	24	*	*	*	*	*	*	*	*	*	*
STATISTICIANS														
TOTAL....................	9	*	6	6	*	*	*	*	3	*	*	*	*	*
MEN....................	6	*	3	3	*	*	*	*	3	*	*	*	*	*
WOMEN....................	3	*	3	3	*	*	*	*	*	*	*	*	*	*
COMPUTER/INFORMATION SPECIALISTS														
TOTAL....................	232	111	96	94	*	2	*	3	20	*	*	*	*	2
MEN....................	223	106	94	94	*	*	*	3	20	*	*	*	*	*
WOMEN....................	9	5	2	*	*	2	*	*	*	*	*	*	*	2
ENVIRONMENTAL SCIENTISTS														
TOTAL....................	198	53	86	86	*	*	*	*	49	5	5	*	*	*
MEN....................	182	50	73	73	*	*	*	*	49	5	5	*	*	*
WOMEN....................	16	3	13	13	*	*	*	*	*	*	*	*	*	*
EARTH SCIENTISTS														
TOTAL....................	152	50	50	50	*	*	*	*	42	5	5	*	*	*
MEN....................	148	49	47	47	*	*	*	*	42	5	5	*	*	*
WOMEN....................	4	1	3	3	*	*	*	*	*	*	*	*	*	*
OCEANOGRAPHERS														
TOTAL....................	18	*	16	16	*	*	*	*	2	*	*	*	*	*
MEN....................	9	*	7	7	*	*	*	*	2	*	*	*	*	*
WOMEN....................	9	*	9	9	*	*	*	*	*	*	*	*	*	*
ATMOSPHERIC SCIENTISTS														
TOTAL....................	28	3	20	20	*	*	*	*	5	*	*	*	*	*
MEN....................	25	1	19	19	*	*	*	*	5	*	*	*	*	*
WOMEN....................	3	2	1	1	*	*	*	*	*	*	*	*	*	*
LIFE SCIENTISTS														
TOTAL....................	1,267	246	793	782	11	*	37	79	73	*	23	*	7	9
MEN....................	1,066	213	669	659	10	*	26	70	58	*	20	*	7	3
WOMEN....................	201	33	124	123	1	*	11	9	15	*	3	*	*	6
BIOLOGICAL SCIENTISTS														
TOTAL....................	674	74	500	494	6	*	14	22	42	*	13	*	*	9
MEN....................	562	60	427	421	6	*	7	16	38	*	11	*	*	3
WOMEN....................	112	14	73	73	*	*	7	6	4	*	2	*	*	6
AGRICULTURAL SCIENTISTS														
TOTAL....................	271	111	142	138	4	*	*	*	8	*	3	*	7	*
MEN....................	252	106	136	132	4	*	*	*	*	*	3	*	7	*
WOMEN....................	19	5	6	6	*	*	*	*	8	*	*	*	*	*
MEDICAL SCIENTISTS														
TOTAL....................	322	61	151	150	1	*	23	57	23	*	7	*	*	*
MEN....................	252	47	106	106	*	*	19	54	20	*	6	*	*	*
WOMEN....................	70	14	45	44	1	*	4	3	3	*	1	*	*	*
PSYCHOLOGISTS														
TOTAL....................	699	154	285	205	34	46	164	27	7	7	24	25	*	6
MEN....................	501	138	178	140	31	7	133	9	4	4	24	11	*	*
WOMEN....................	198	16	107	65	3	39	31	18	3	3	*	14	*	6
SOCIAL SCIENTISTS														
TOTAL....................	954	90	587	581	6	*	3	55	70	*	43	13	93	*
MEN....................	792	79	476	476	*	*	3	49	66	*	41	7	71	*
WOMEN....................	162	11	111	105	6	*	*	6	4	*	2	6	22	*
ECONOMISTS														
TOTAL....................	332	58	153	153	*	*	*	11	*	*	27	*	83	*
MEN....................	297	53	139	139	*	*	*	7	*	*	27	*	71	*
WOMEN....................	35	5	14	14	*	*	*	4	*	*	*	*	12	*
SOCIOLOGISTS/ANTHRO.														
TOTAL....................	174	7	167	167	*	*	*	*	*	*	*	*	*	*
MEN....................	133	5	128	128	*	*	*	*	*	*	*	*	*	*
WOMEN....................	41	2	39	39	*	*	*	*	*	*	*	*	*	*

* NO CASES REPORTED

TABLE B-6A. NUMBER OF EMPLOYED HISPANIC DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, SEX, AND TYPE OF EMPLOYER: 1983
CONTINUED

FIELD	TOTAL EMPL	BUS-INESS/INDUS-TRY	EDUCATIONAL INSTITUTIONS TOTAL	4-YEAR COLL/UNIV	2-YEAR COLL	ELEM/SEC. SCHOOL	HOS-PITAL/CLINIC	NON-PROFIT ORGS	FED-ERAL GOV'T	MILI-TARY/COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NO REPORT
OTHER SOCIAL SCIENTISTS														
TOTAL......................	448	25	267	261	6	*	3	44	70	*	16	13	10	*
MEN......................	362	21	209	209	*	*	3	42	66	*	14	7	*	*
WOMEN......................	86	4	58	52	6	*	*	2	4	*	2	6	10	*
ENGINEERS														
TOTAL......................	936	531	319	316	3	*	*	24	55	2	*	*	5	*
MEN......................	917	514	317	314	3	*	*	24	55	2	*	*	5	*
WOMEN......................	19	17	2	2	*	*	*	*	*	*	*	*	*	*
AERO/ASTRO ENGINEERS														
TOTAL......................	3	*	*	*	*	*	*	*	3	*	*	*	*	*
MEN......................	3	*	*	*	*	*	*	*	3	*	*	*	*	*
WOMEN......................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
CHEMICAL ENGINEERS														
TOTAL......................	114	55	59	59	*	*	*	*	*	*	*	*	*	*
MEN......................	111	52	59	59	*	*	*	*	*	*	*	*	*	*
WOMEN......................	3	3	*	*	*	*	*	*	*	*	*	*	*	*
CIVIL ENGINEERS														
TOTAL......................	72	37	35	35	*	*	*	*	*	*	*	*	*	*
MEN......................	72	37	35	35	*	*	*	*	*	*	*	*	*	*
WOMEN......................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ELEC./ELECTRON. ENGINEERS														
TOTAL......................	216	129	84	84	*	*	*	3	*	*	*	*	*	*
MEN......................	210	123	84	84	*	*	*	3	*	*	*	*	*	*
WOMEN......................	6	6	*	*	*	*	*	*	*	*	*	*	*	*
MATERIALS SCI. ENGINEERS														
TOTAL......................	167	96	68	68	*	*	*	*	3	*	*	*	*	*
MEN......................	164	95	66	66	*	*	*	*	3	*	*	*	*	*
WOMEN......................	3	1	2	2	*	*	*	*	*	*	*	*	*	*
MECHANICAL ENGINEERS														
TOTAL......................	78	22	23	23	*	*	*	*	33	*	*	*	*	*
MEN......................	78	22	23	23	*	*	*	*	33	*	*	*	*	*
WOMEN......................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NUCLEAR ENGINEERS														
TOTAL......................	9	9	*	*	*	*	*	*	*	*	*	*	*	*
MEN......................	9	9	*	*	*	*	*	*	*	*	*	*	*	*
WOMEN......................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
SYSTEMS DESIGN ENGINEERS														
TOTAL......................	149	112	2	2	*	*	*	21	14	*	*	*	*	*
MEN......................	149	112	2	2	*	*	*	21	14	*	*	*	*	*
WOMEN......................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER ENGINEERS														
TOTAL......................	128	71	48	45	3	*	*	*	2	2	*	*	5	*
MEN......................	121	64	48	45	3	*	*	*	2	2	*	*	5	*
WOMEN......................	7	7	*	*	*	*	*	*	*	*	*	*	*	*

* NO CASES REPORTED

SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE B-7. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, AGE, AND PRIMARY WORK ACTIVITY: 1983

FIELD AND AGE	TOTAL EMPL	RESEARCH AND DEVELOPMENT TOTAL	BASIC RE-SEARCH	APPL'D RE-SEARCH	DEVEL-OPMENT	MANAGEMENT OR ADMIN TOTAL	OF R&D	OF OTHER	TEACH-ING	CON-SULT-ING	SALES/PROF. SER-VICES	OTHER	NO REPORT
ALL FIELDS													
TOTAL	369,320	124,788	57,137	47,374	20,277	61,813	31,418	30,395	108,236	12,746	29,820	24,163	7,754
UNDER 30	6,444	3,984	2,451	1,057	476	136	105	31	1,300	180	663	161	40
30-34	48,157	26,840	13,141	9,527	3,412	2,697	1,686	1,011	9,599	1,278	5,047	2,629	827
35-39	75,963	30,075	13,405	11,075	5,515	10,816	6,195	4,621	19,060	2,248	7,482	5,395	887
40-44	80,283	24,596	10,938	9,660	3,998	15,622	8,777	6,845	23,700	3,056	6,016	5,625	1,668
45-49	51,832	14,466	5,998	5,518	2,950	11,146	5,378	5,768	16,510	1,721	3,514	3,113	1,362
50-54	39,762	10,098	4,354	3,920	1,824	8,658	3,932	4,726	13,607	1,196	2,770	2,572	861
55-59	31,902	7,803	3,542	3,344	917	6,827	2,818	4,009	11,775	825	1,983	1,871	818
60-64	22,569	5,150	1,918	2,315	917	4,338	1,942	2,396	8,459	1,067	1,361	1,473	721
65-69	9,573	1,937	997	731	199	1,307	517	790	3,441	832	714	1,039	313
70 OR OVER	2,562	465	202	194	69	259	66	193	723	329	258	283	245
NO REPORT	253	144	111	33	*	7	2	5	62	14	12	2	12
SCIENTISTS													
TOTAL	307,775	100,042	54,038	35,490	10,514	46,321	20,881	25,440	96,483	8,999	28,560	20,435	7,007
UNDER 30	5,318	3,171	2,303	651	217	73	70	3	1,092	118	663	161	40
30-34	41,202	21,529	12,568	7,015	1,946	2,090	1,191	899	8,519	1,086	4,965	2,299	714
35-39	63,774	24,090	12,796	8,334	2,960	8,272	4,203	4,069	17,209	1,656	7,048	4,673	826
40-44	65,844	19,506	10,253	7,089	2,244	11,061	5,224	5,837	21,137	1,974	5,840	4,731	1,515
45-49	41,703	10,940	5,469	3,942	1,529	8,302	3,723	4,579	14,379	1,111	3,221	2,506	1,244
50-54	32,666	7,937	4,168	2,995	774	6,312	2,614	3,698	12,320	749	2,632	1,990	726
55-59	26,957	6,245	3,347	2,568	330	5,489	2,004	3,485	10,321	643	1,903	1,588	768
60-64	19,297	4,349	1,853	2,020	476	3,364	1,336	2,028	7,571	719	1,347	1,253	694
65-69	8,575	1,686	968	690	28	1,155	461	694	3,143	655	687	965	284
70 OR OVER	2,202	365	202	153	10	196	53	143	650	288	252	267	184
NO REPORT	237	144	111	33	*	7	2	5	62	*	10	2	12
PHYSICAL SCIENTISTS													
TOTAL	63,986	29,053	14,049	11,520	3,484	11,845	8,793	3,052	14,652	925	1,641	4,528	1,342
UNDER 30	1,446	1,197	876	271	50	2	2	*	159	*	*	86	2
30-34	7,993	6,251	3,226	2,410	615	429	388	41	693	28	149	371	72
35-39	10,824	5,905	2,895	2,220	790	1,916	1,702	214	1,711	29	358	754	151
40-44	14,022	5,976	2,559	2,594	823	2,984	2,156	828	3,537	218	321	731	255
45-49	9,948	3,474	1,582	1,443	449	2,096	1,514	582	2,936	114	304	674	350
50-54	7,548	2,496	1,148	1,019	329	1,885	1,336	549	2,096	126	181	612	152
55-59	5,526	1,831	947	740	144	1,349	885	464	1,465	49	165	529	130
60-64	4,334	1,304	423	599	282	695	553	142	1,356	112	152	534	181
65-69	1,961	538	352	184	2	389	204	185	604	179	7	217	27
70 OR OVER	348	47	13	34	*	100	53	47	93	70	4	20	14
NO REPORT	36	34	28	6	*	*	*	*	2	*	*	*	*
CHEMISTS													
TOTAL	41,298	17,985	7,901	7,629	2,455	8,258	6,533	1,725	8,995	654	1,173	3,539	694
UNDER 30	1,075	888	626	226	36	2	2	*	113	*	*	72	*
30-34	5,484	4,187	1,933	1,774	480	378	341	37	476	28	83	288	44
35-39	7,038	3,506	1,473	1,415	618	1,441	1,308	133	1,150	26	254	598	63
40-44	8,607	3,407	1,441	1,573	393	1,960	1,520	440	2,329	105	218	472	116
45-49	5,820	1,811	675	857	279	1,320	1,054	266	1,830	33	211	482	133
50-54	5,285	1,676	639	764	273	1,435	1,075	360	1,229	123	150	554	110
55-59	3,354	1,155	553	493	109	905	642	263	615	49	129	433	68
60-64	2,993	945	279	399	267	437	396	41	836	67	109	457	142
65-69	1,366	329	241	88	*	312	161	151	377	153	7	182	6
70 OR OVER	240	47	13	34	*	68	34	34	38	70	4	1	12
NO REPORT	36	34	28	6	*	*	*	*	2	*	*	*	*
PHYSICISTS/ASTRONOMERS													
TOTAL	22,688	11,068	6,148	3,891	1,029	3,587	2,260	1,327	5,657	271	460	989	648
UNDER 30	371	308	250	45	14	*	*	*	46	*	*	14	2
30-34	2,509	2,064	1,293	636	135	51	47	4	217	*	66	83	28
35-39	3,786	2,399	1,422	805	172	475	394	81	561	3	104	156	88
40-44	5,415	2,569	1,118	1,021	430	1,024	636	388	1,208	113	103	259	139
45-49	4,128	1,663	907	586	170	776	460	316	1,106	81	93	192	217
50-54	2,263	820	509	255	56	450	261	189	867	3	23	58	42
55-59	2,172	676	394	247	35	444	243	201	850	*	36	96	70
60-64	1,341	359	144	200	15	258	157	101	520	45	43	77	39
65-69	595	209	111	96	2	77	43	34	227	26	*	38	21
70 OR OVER	108	*	*	*	*	32	19	13	55	*	*	19	2
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*
MATHEMATICAL SCIENTISTS													
TOTAL	16,379	3,403	1,767	1,146	490	1,496	531	965	9,701	599	261	327	592
UNDER 30	295	143	104	35	4	2	2	*	150	*	*	*	*
30-34	1,887	614	418	138	50	57	39	18	1,029	103	19	7	58
35-39	2,903	781	378	219	184	128	104	24	1,635	175	102	[illegible]	107
40-44	4,323	831	323	364	144	505	207	370	2,440	128	47	160	132
45-49	2,666	360	181	118	61	359	86	273	1,676	64	57	35	115
50-54	1,690	215	127	66	22	163	35	128	1,174	16	26	27	69
55-59	1,150	151	109	40	2	119	37	82	809	8	7	15	41
60-64	817	183	74	102	7	60	13	47	489	37	1	8	39
65-69	455	91	32	51	8	23	8	15	240	68	*	19	14
70 OR OVER	111	34	21	13	*	*	*	*	57	*	2	1	17
NO REPORT	2	*	*	*	*	*	*	*	2	*	*	*	*
MATHEMATICIANS													
TOTAL	13,589	2,009	1,608	790	411	1,128	258	870	8,324	296	237	247	548
UNDER 30	245	141	104	33	4	2	2	*	102	*	*	*	*
30-34	1,568	506	343	109	54	57	39	18	874	52	19	2	58
35-39	2,454	688	377	159	152	78	58	20	1,362	98	86	35	107
40-44	3,534	660	323	195	142	431	71	360	2,115	67	45	105	111
45-49	2,171	292	167	75	50	252	27	225	1,406	17	54	35	115
50-54	1,409	154	101	53	*	132	17	115	1,018	2	23	27	53
55-59	1,023	114	108	4	2	93	23	70	745	8	7	15	41
60-64	763	153	44	102	7	60	13	47	465	37	1	8	39
65-69	316	67	20	47	*	23	6	15	170	15	*	19	14
70 OR OVER	104	34	21	13	*	*	*	*	57	*	2	1	10
NO REPORT	2	*	*	*	*	*	*	*	2	*	*	*	*

* NO CASES REPORTED

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TABLE B-7. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, AGE, AND PRIMARY WORK ACTIVITY: 1983
CONTINUED

		RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN							
FIELD AND AGE	TOTAL EMPL	TOTAL	BASIC RE-SEARCH	APPL'D RE-SEARCH	DEVEL-OPMENT	TOTAL	OF R&D	OF OTHER	TEACH-ING	CON-SULT-ING	SALES/ PROF. SER-VICES	OTHER	NO REPORT
STATISTICIANS													
TOTAL....................	2,790	594	159	356	79	368	273	95	1,377	303	24	80	44
UNDER 30..............	50	2	*	2	*	*	*	*	48	*	*	*	*
30-34.....................	319	108	75	29	4	*	*	*	155	51	*	5	*
35-39.....................	529	93	1	60	32	50	46	4	273	77	16	20	*
40-44.....................	789	171	*	169	2	154	136	18	325	61	2	55	21
45-49.....................	495	68	14	43	11	107	59	48	270	47	3	*	*
50-54.....................	281	61	26	13	22	31	18	13	156	14	3	*	16
55-59.....................	127	37	1	36	*	26	14	12	64	*	*	*	*
60-64.....................	54	30	30	*	*	*	*	*	24	*	*	*	*
65-69.....................	139	24	12	4	8	*	*	*	62	53	*	*	*
70 OR OVER............	7	*	*	*	*	*	*	*	*	*	*	*	7
NO REPORT.............	*	*	*	*	*	*	*	*	*	*	*	*	*
COMPUTER/INFORMATION SPECIALISTS													
TOTAL....................	12,164	5,400	615	893	3,892	2,052	1,114	938	2,361	678	375	1,181	117
UNDER 30..............	236	209	73	42	94	*	*	*	21	6	*	*	*
30-34.....................	1,915	1,076	231	178	667	196	137	59	321	106	42	170	4
35-39.....................	3,761	1,749	116	291	1,342	600	406	194	722	218	116	324	32
40-44.....................	2,720	941	82	169	690	536	277	259	515	189	138	352	49
45-49.....................	1,600	777	17	118	642	274	129	145	332	37	32	142	6
50-54.....................	799	314	39	30	245	249	114	135	138	36	21	41	*
55-59.....................	561	182	47	29	106	120	25	95	148	51	17	41	2
60-64.....................	447	145	10	36	99	69	26	43	128	35	9	41	10
65-69.....................	116	7	*	*	7	*	*	*	36	*	*	69	4
70 OR OVER............	9	*	*	*	*	8	*	8	*	*	*	1	*
NO REPORT.............	*	*	*	*	*	*	*	*	*	*	*	*	*
ENVIRONMENTAL SCIENTISTS													
TOTAL....................	16,467	6,728	3,287	3,112	329	3,129	1,825	1,304	3,435	1,198	242	1,445	290
UNDER 30..............	205	81	41	27	13	13	13	*	67	40	*	4	*
30-34.....................	2,232	1,463	805	581	77	165	63	102	298	152	16	132	6
35-39.....................	3,518	1,717	746	885	86	458	296	162	613	171	86	368	105
40-44.....................	3,187	1,286	578	641	67	676	391	285	613	263	73	259	17
45-49.....................	2,563	749	362	338	49	800	583	217	497	221	5	250	41
50-54.....................	1,825	521	328	193	*	422	187	235	615	75	45	123	24
55-59.....................	1,123	388	165	215	8	341	144	197	270	57	4	36	27
60-64.....................	1,261	369	195	145	29	240	142	98	367	94	13	138	40
65-69.....................	391	105	46	59	*	14	6	8	83	72	*	102	15
70 OR OVER............	162	49	21	28	*	*	*	*	12	53	*	33	15
NO REPORT.............	*	*	*	*	*	*	*	*	*	*	*	*	*
EARTH SCIENTISTS													
TOTAL....................	12,523	4,355	1,852	2,257	246	2,480	1,270	1,210	2,918	1,073	199	1,269	229
UNDER 30..............	133	50	10	27	13	13	13	*	28	40	*	2	*
30-34.....................	1,560	888	381	449	58	162	60	102	247	150	16	91	6
35-39.....................	2,508	1,052	437	571	44	336	191	145	477	154	74	340	75
40-44.....................	2,392	762	245	451	66	550	276	274	540	232	44	247	17
45-49.....................	1,971	535	246	240	49	558	372	186	429	181	3	232	33
50-54.....................	1,595	426	260	166	*	369	155	214	560	68	45	103	24
55-59.....................	913	249	94	147	8	312	123	189	255	50	4	16	27
60-64.....................	968	273	146	119	8	166	74	92	301	88	13	103	24
65-69.....................	357	92	33	59	*	14	6	8	69	72	*	102	8
70 OR OVER............	126	28	*	28	*	*	*	*	12	38	*	33	15
NO REPORT.............	*	*	*	*	*	*	*	*	*	*	*	*	*
OCEANOGRAPHERS													
TOTAL....................	1,742	1,030	771	243	16	311	257	54	188	46	43	72	52
UNDER 30..............	19	17	17	*	*	*	*	*	*	*	*	2	*
30-34.....................	367	304	216	74	14	3	3	*	29	2	*	29	*
35-39.....................	405	256	164	90	2	60	56	4	24	12	12	11	30
40-44.....................	405	246	206	40	*	62	53	9	52	10	29	6	*
45-49.....................	273	95	76	19	*	125	99	26	31	8	2	4	8
50-54.....................	82	16	2	14	*	26	19	7	25	7	*	8	*
55-59.....................	89	48	48	*	*	14	6	8	15	*	*	12	*
60-64.....................	60	20	14	6	*	21	21	*	12	*	*	*	7
65-69.....................	14	7	7	*	*	*	*	*	*	*	*	*	7
70 OR OVER............	28	21	21	*	*	*	*	*	*	7	*	*	*
NO REPORT.............	*	*	*	*	*	*	*	*	*	*	*	*	*
ATMOSPHERIC SCIENTISTS													
TOTAL....................	2,202	1,343	664	612	67	338	298	40	329	79	*	104	9
UNDER 30..............	53	14	14	*	*	*	*	*	39	*	*	*	*
30-34.....................	305	271	208	58	5	*	*	*	22	*	*	12	*
35-39.....................	605	409	145	224	40	62	49	13	112	5	*	17	*
40-44.....................	390	278	127	150	1	64	62	2	21	21	*	6	*
45-49.....................	319	119	40	79	*	117	112	5	37	32	*	14	*
50-54.....................	148	79	66	13	*	27	13	14	30	*	*	12	*
55-59.....................	121	91	23	68	*	15	15	*	*	7	*	8	*
60-64.....................	233	76	35	20	21	53	47	6	54	6	*	35	9
65-69.....................	20	6	6	*	*	*	*	*	14	*	*	*	*
70 OR OVER............	8	*	*	*	*	*	*	*	*	8	*	*	*
NO REPORT.............	*	*	*	*	*	*	*	*	*	*	*	*	*
LIFE SCIENTISTS													
TOTAL....................	92,802	41,023	28,784	10,707	1,532	12,971	6,165	6,806	22,452	1,981	6,223	5,566	2,586
UNDER 30..............	1,621	1,233	997	183	53	26	26	*	145	36	120	23	38
30-34.....................	13,167	9,118	6,846	1,882	390	501	322	179	1,709	160	809	647	223
35-39.....................	19,398	9,794	7,093	2,303	398	1,946	1,039	907	4,029	363	1,589	1,389	288
40-44.....................	19,660	7,923	5,770	1,897	256	2,963	1,572	1,391	4,738	411	1,604	1,345	676
45-49.....................	12,009	4,312	2,812	1,278	222	2,426	1,089	1,337	3,448	212	568	659	384
50-54.....................	9,726	3,390	2,134	1,160	96	1,813	732	1,081	3,018	196	687	396	226
55-59.....................	8,601	2,849	1,734	1,053	62	1,814	773	1,041	2,555	148	378	510	347
60-64.....................	5,594	1,611	898	675	38	1,049	425	624	1,934	214	248	302	236
65-69.....................	2,402	647	418	222	7	398	185	213	714	157	144	230	112
70 OR OVER............	581	131	67	54	10	33	*	33	154	84	66	63	50
NO REPORT.............	43	15	15	*	*	2	2	*	8	*	10	2	6

* NO CASES REPORTED

TABLE B-7. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, AGE, AND PRIMARY WORK ACTIVITY: 1983
CONTINUED

FIELD AND AGE	TOTAL EMPL.	RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN			TEACH-ING	CON-SULT-ING	SALES/ PROF. SER-VICES	OTHER	NO REPORT
		TOTAL	BASIC RE-SEARCH	APPL'D RE-SEARCH	DEVEL-OPMENT	TOTAL	OF R&D	OF OTHER					
BIOLOGICAL SCIENTISTS													
TOTAL	55,205	28,080	23,129	4,312	639	5,875	2,835	3,040	15,156	886	1,139	2,504	1,565
UNDER 30	1,197	989	895	77	17	6	6	*	123	36	10	7	26
30-34	8,929	6,921	5,664	1,064	193	235	171	64	1,148	51	117	336	121
35-39	11,873	6,811	5,731	949	131	993	567	426	2,752	147	298	689	183
40-44	11,790	5,587	4,691	819	77	1,418	827	591	3,400	243	306	527	309
45-49	6,737	2,759	2,195	448	116	921	391	530	2,330	86	78	328	235
50-54	5,305	2,019	1,645	325	49	730	255	475	1,976	81	170	145	184
55-59	4,863	1,593	1,267	295	31	905	395	510	1,730	62	106	212	255
60-64	2,964	916	640	251	25	446	122	324	1,161	81	42	140	178
65-69	1,249	391	333	58	*	204	101	103	440	71	7	87	49
70 OR OVER	277	79	53	26	*	17	*	17	96	28	5	33	19
NO REPORT	21	15	15	*	*	*	*	*	*	*	*	*	6
AGRICULTURAL SCIENTISTS													
TOTAL	14,536	6,213	1,653	4,200	360	2,833	1,609	1,224	2,489	465	617	1,490	421
UNDER 30	144	134	35	99	*	5	5	*	*	*	*	2	3
30-34	1,571	869	314	457	98	161	115	46	198	50	91	179	23
35-39	2,471	1,180	275	772	133	307	212	95	483	70	97	293	41
40-44	3,097	1,159	306	774	79	583	364	219	425	83	203	448	196
45-49	2,086	768	214	536	18	556	296	260	356	52	99	185	70
50-54	1,677	680	146	518	16	458	235	223	297	38	68	127	9
55-59	1,563	789	196	577	16	361	178	183	230	36	21	107	22
60-64	1,263	422	120	302	*	290	146	144	354	57	38	65	37
65-69	564	184	40	144	*	94	56	38	140	44	*	89	13
70 OR OVER	93	28	7	21	*	16	*	16	6	35	*	1	7
NO REPORT	4	*	*	*	*	2	2	*	*	*	*	2	*
MEDICAL SCIENTISTS													
TOTAL	23,061	6,730	4,002	2,195	533	4,263	1,721	2,542	4,807	630	4,467	1,364	600
UNDER 30	280	110	67	7	36	15	15	*	22	*	110	14	9
30-34	2,667	1,328	868	361	99	105	36	69	363	59	601	132	79
35-39	5,054	1,803	1,087	582	134	646	260	386	794	146	1,194	407	64
40-44	4,773	1,177	773	304	100	962	381	581	913	85	1,095	370	171
45-49	3,186	785	403	294	88	949	402	547	762	74	391	146	79
50-54	2,744	691	343	317	31	625	242	383	745	77	449	124	33
55-59	2,172	467	271	181	15	548	200	348	595	50	251	191	70
60-64	1,367	273	138	122	13	313	157	156	419	76	168	97	21
65-69	589	72	45	20	7	100	28	72	134	42	137	54	50
70 OR OVER	211	24	7	7	10	*	*	*	52	21	61	29	24
NO REPORT	18	*	*	*	*	*	*	*	8	*	10	*	*
PSYCHOLOGISTS													
TOTAL	46,645	5,017	2,344	2,360	313	5,608	903	4,705	12,708	2,084	18,488	2,081	659
UNDER 30	913	127	85	41	1	30	27	3	168	15	543	30	*
30-34	7,708	1,190	481	608	101	508	156	352	1,429	359	3,771	294	157
35-39	10,979	1,516	720	681	115	1,242	184	1,058	2,643	427	4,543	480	128
40-44	8,250	646	347	276	23	1,047	124	923	2,399	453	3,249	353	103
45-49	5,704	538	274	204	60	759	132	627	1,796	243	2,080	172	116
50-54	4,466	335	170	156	9	720	101	619	1,431	187	1,524	231	38
55-59	4,409	346	155	187	4	773	53	720	1,541	203	1,264	228	54
60-64	2,576	235	54	181	*	415	95	320	765	120	888	128	25
65-69	1,178	49	23	26	*	96	31	65	385	49	450	135	14
70 OR OVER	439	35	35	*	*	13	*	13	139	28	176	30	18
NO REPORT	23	*	*	*	*	5	*	5	12	*	*	*	6
SOCIAL SCIENTISTS													
TOTAL	59,332	9,418	3,192	5,752	474	9,220	1,550	7,670	31,096	1,534	1,338	5,307	1,421
UNDER 30	602	181	127	52	2	*	*	*	382	21	*	18	*
30-34	6,300	1,817	561	1,218	38	234	86	148	3,040	178	159	678	194
35-39	12,311	2,628	848	1,735	45	1,982	472	1,510	5,856	273	254	1,303	15
40-44	13,682	1,983	594	1,148	241	2,270	497	1,773	6,895	312	408	1,531	283
45-49	7,213	730	241	443	46	1,588	190	1,398	3,694	220	175	574	232
50-54	6,612	666	222	371	73	1,060	109	951	3,848	113	148	560	217
55-59	5,587	498	190	304	4	973	87	886	3,533	127	68	229	159
60-64	4,268	502	199	282	21	836	82	754	2,532	107	36	102	153
65-69	2,072	249	97	148	4	235	27	208	1,081	130	86	193	98
70 OR OVER	552	69	45	24	*	42	*	42	195	53	4	119	70
NO REPORT	133	95	68	27	*	*	*	*	38	*	*	*	*
ECONOMISTS													
TOTAL	16,958	3,911	824	2,947	140	2,443	488	1,955	7,803	781	387	1,393	240
UNDER 30	379	124	70	52	2	*	*	*	228	21	*	6	*
30-34	1,942	926	278	648	*	57	*	57	740	78	21	77	43
35-39	3,496	888	99	771	18	409	136	273	1,626	133	38	402	*
40-44	3,709	655	168	449	38	593	177	416	1,562	145	140	604	10
45-49	1,879	388	97	282	9	460	28	432	828	121	9	42	31
50-54	1,521	331	61	218	52	202	28	174	757	73	65	64	29
55-59	1,756	222	*	222	*	333	64	269	999	75	43	84	*
60-64	1,293	277	18	238	21	241	28	213	606	55	34	21	59
65-69	841	83	33	50	*	131	27	104	406	63	33	91	34
70 OR OVER	140	17	*	17	*	17	*	17	49	17	4	2	34
NO REPORT	2	*	*	*	*	*	*	*	2	*	*	*	*
SOCIOLOGISTS/ANTHRO.													
TOTAL	12,856	1,823	1,056	760	7	1,228	67	1,161	7,565	141	243	730	326
UNDER 30	66	25	25	*	*	*	*	*	32	*	*	9	*
30-34	1,260	220	55	165	*	18	16	2	787	69	32	104	30
35-39	2,191	543	332	209	2	187	*	187	1,247	10	64	132	8
40-44	3,069	493	234	254	5	444	6	438	1,896	7	27	173	29
45-49	1,555	136	77	59	*	186	20	166	868	26	64	182	93
50-54	1,176	68	45	23	*	133	*	133	827	*	31	72	45
55-59	1,389	201	163	38	*	104	8	96	1,033	*	*	3	48
60-64	869	80	77	3	*	148	17	131	602	*	*	30	9
65-69	382	24	20	4	*	4	*	4	232	29	25	21	47
70 OR OVER	99	33	28	5	*	4	*	4	41	*	*	4	17
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*

* NO CASES REPORTED

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TABLE B-7. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, AGE, AND PRIMARY WORK ACTIVITY: 1983
CONTINUED

FIELD AND AGE	TOTAL EMPL	RESEARCH AND DEVELOPMENT TOTAL	BASIC RESEARCH	APPL'D RESEARCH	DEVEL-OPMENT	MANAGEMENT OR ADMIN TOTAL	OF R&D	OF OTHER	TEACH-ING	CON-SULT-ING	SALES/PROF. SER-VICES	OTHER	NO REPORT
OTHER SOCIAL SCIENTISTS													
TOTAL	30,318	3,684	1,312	2,043	327	5,549	995	4,554	15,726	612	708	3,104	855
UNDER 30	157	32	32	*	*	*	*	*	122	*	*	3	*
30-34	3,090	671	228	405	38	159	70	89	1,513	31	106	497	121
35-39	6,624	1,197	417	755	25	1,386	336	1,050	2,983	130	152	769	7
40-44	6,904	835	192	445	198	1,233	314	919	3,437	160	241	754	244
45-49	3,779	206	67	102	37	942	142	800	1,990	73	102	350	108
50-54	3,915	267	116	130	21	725	81	644	2,264	40	52	424	143
55-59	2,442	75	27	44	4	536	15	521	1,501	52	25	142	111
60-64	2,106	145	104	41	*	447	37	410	1,324	52	2	51	85
65-69	840	142	44	94	4	100	*	100	443	38	28	81	17
70 OR OVER	313	19	17	2	*	21	*	21	105	36	*	113	19
NO REPORT	131	95	68	27	*	*	*	*	36	*	*	*	*
ENGINEERS													
TOTAL	61,545	24,746	3,099	11,884	9,763	15,492	10,537	4,955	11,833	3,747	1,252	3,728	747
UNDER 30	1,146	813	148	406	259	63	35	28	208	62	*	*	*
30-34	6,955	4,551	573	2,512	1,466	607	495	112	1,080	192	82	330	113
35-39	12,189	5,985	689	2,741	2,555	2,544	1,992	552	1,851	592	434	722	61
40-44	14,439	5,010	685	2,571	1,754	4,561	3,553	1,008	2,563	1,082	176	894	153
45-49	10,129	3,526	529	1,576	1,421	2,844	1,655	1,189	2,131	610	293	607	118
50-54	7,096	2,161	186	925	1,050	2,346	1,318	1,028	1,287	447	138	582	135
55-59	4,945	1,558	195	776	587	1,338	814	524	1,454	182	80	283	50
60-64	3,272	801	65	295	441	974	606	368	888	348	14	220	27
65-69	998	241	29	41	171	152	56	96	298	177	27	74	29
70 OR OVER	360	100	*	41	59	63	13	50	73	41	6	16	61
NO REPORT	16	*	*	*	*	*	*	*	*	14	2	*	*
AERO/ASTRO ENGINEERS													
TOTAL	3,684	1,800	273	721	806	954	798	156	517	138	79	196	*
UNDER 30	112	112	*	*	112	*	*	*	*	*	*	*	*
30-34	391	352	71	206	75	8	8	*	27	*	*	4	*
35-39	796	431	46	156	229	173	159	14	65	22	46	59	*
40-44	631	260	47	153	60	298	248	50	44	*	*	29	*
45-49	711	283	79	109	95	228	226	2	111	44	*	45	*
50-54	399	174	22	67	85	79	79	*	81	7	33	25	*
55-59	376	109	*	30	79	121	50	71	146	*	*	*	*
60-64	234	79	8	*	71	21	21	*	35	65	*	34	*
65-69	34	*	*	*	*	26	7	19	8	*	*	*	*
70 OR OVER	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*
CHEMICAL ENGINEERS													
TOTAL	6,992	2,968	374	1,680	914	1,697	1,110	587	1,078	227	185	775	62
UNDER 30	368	228	112	112	4	28	*	28	112	*	*	*	*
30-34	977	760	89	615	56	78	72	6	98	2	*	39	*
35-39	1,593	768	26	420	322	266	244	22	184	*	125	246	4
40-44	1,248	294	45	130	119	490	403	87	156	52	2	254	*
45-49	1,257	245	29	140	76	450	233	217	326	66	58	68	44
50-54	586	313	42	126	145	158	33	125	35	*	*	80	*
55-59	471	188	31	63	94	132	45	87	77	15	*	59	*
60-64	428	137	*	59	78	95	80	15	75	78	*	29	14
65-69	50	35	*	15	20	*	*	*	15	*	*	*	*
70 OR OVER	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	14	*	*	*	*	*	*	*	*	14	*	*	*
CIVIL ENGINEERS													
TOTAL	5,317	898	189	391	318	778	180	598	2,132	934	113	360	102
UNDER 30	87	80	*	80	*	*	*	*	7	*	*	*	*
30-34	353	66	*	8	58	*	*	*	99	79	*	82	27
35-39	1,210	350	121	168	61	74	25	49	334	348	50	32	22
40-44	1,227	101	*	56	45	160	66	94	609	237	60	60	*
45-49	711	199	68	*	131	85	17	68	262	102	3	40	20
50-54	857	45	*	44	1	313	47	266	299	133	*	67	*
55-59	529	30	*	21	9	116	25	91	383	*	*	*	*
60-64	224	*	*	*	*	30	*	30	95	20	*	79	*
65-69	45	*	*	*	*	*	*	*	30	15	*	*	*
70 OR OVER	74	27	*	14	13	*	*	*	14	*	*	*	33
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*
ELEC./ELECTRON. ENGINEERS													
TOTAL	12,696	5,006	330	2,125	2,551	3,961	2,817	1,144	2,447	380	247	408	247
UNDER 30	96	94	3	56	35	*	*	*	2	*	*	*	*
30-34	1,337	949	22	449	478	111	111	*	220	*	*	21	36
35-39	2,779	1,424	86	512	826	547	452	95	624	9	120	55	*
40-44	3,545	1,110	136	537	437	1,409	1,116	293	525	173	64	157	107
45-49	1,814	496	50	197	249	905	477	428	280	36	1	96	*
50-54	1,178	277	*	144	133	562	390	172	111	57	33	49	88
55-59	1,062	417	33	210	174	210	153	57	334	41	29	30	1
60-64	712	166	*	7	159	204	105	99	278	64	*	*	*
65-69	85	27	*	13	14	*	*	*	44	*	*	*	14
70 OR OVER	88	46	*	*	46	13	13	*	29	*	*	*	*
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*
MATERIALS SCI. ENGINEERS													
TOTAL	7,422	3,591	936	2,007	648	2,308	1,947	361	799	141	122	438	23
UNDER 30	103	64	4	55	5	35	35	*	4	*	*	*	*
30-34	1,087	836	314	467	55	116	116	*	31	1	23	57	23
35-39	1,073	641	140	293	208	377	294	83	52	*	3	*	*
40-44	1,710	710	141	458	111	703	684	19	162	32	*	103	[illegible]
45-49	1,222	678	251	332	95	232	146	86	170	*	45	97	*
50-54	985	326	42	171	113	358	292	66	164	49	35	53	*
55-59	573	220	*	173	47	193	178	15	61	*	*	99	*
60-64	491	101	29	58	14	236	188	48	112	14	14	14	*
65-69	131	15	15	*	*	43	14	29	28	30	*	15	*
70 OR OVER	45	*	*	*	*	15	*	15	15	15	*	*	*
NO REPORT	2	*	*	*	*	*	*	*	*	*	2	*	*

* NO CASES REPORTED

TABLE B-7. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, AGE, AND PRIMARY WORK ACTIVITY: 1983
CONTINUED

FIELD AND AGE	TOTAL EMPL.	RESEARCH AND DEVELOPMENT TOTAL	BASIC RE-SEARCH	APPL'D RE-SEARCH	DEVEL-OPMENT	MANAGEMENT OR ADMIN TOTAL	OF R&D	OF OTHER	TEACH-ING	CON-SULT-ING	SALES/ PROF. SER-VICES	OTHER	NO REPORT
MECHANICAL ENGINEERS													
TOTAL	5,657	1,891	156	680	1,056	1,088	597	491	1,867	342	65	377	27
UNDER 30	16	12	2	*	10	*	*	*	4	*	*	*	*
30-34	579	204	*	112	92	10	2	8	315	23	*	*	27
35-39	1,084	462	42	198	222	315	169	146	110	66	22	109	*
40-44	1,297	363	*	202	161	283	196	87	454	86	*	111	*
45-49	1,094	412	33	121	258	164	101	63	374	79	43	22	*
50-54	884	252	*	34	218	172	79	93	311	44	*	105	*
55-59	392	93	65	*	28	130	50	80	139	15	*	15	*
60-64	159	33	*	*	33	14	*	14	97	15	*	*	*
65-69	109	47	14	*	33	*	*	*	48	14	*	*	*
70 OR OVER	43	13	*	13	*	*	*	*	15	*	*	15	*
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*
NUCLEAR ENGINEERS													
TOTAL	2,329	1,146	22	588	536	547	296	251	275	225	38	55	43
UNDER 30	27	27	*	27	*	*	*	*	*	*	*	*	*
30-34	188	116	*	53	63	38	38	*	32	*	*	2	*
35-39	517	327	22	157	148	86	25	61	75	*	24	5	*
40-44	631	320	*	262	58	93	59	34	24	138	*	13	43
45-49	339	131	*	24	107	118	46	72	68	*	*	22	*
50-54	169	34	*	*	34	69	35	34	22	44	*	*	*
55-59	195	113	*	65	48	39	39	*	*	30	*	13	*
60-64	124	28	*	*	28	69	54	15	27	*	*	*	*
65-69	91	50	*	*	50	*	*	*	27	*	14	*	*
70 OR OVER	48	*	*	*	*	35	*	35	*	13	*	*	*
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*
SYSTEMS DESIGN ENGINEERS													
TOTAL	3,891	1,825	38	421	1,366	830	699	131	585	288	79	268	16
UNDER 30	123	123	*	44	79	*	*	*	*	*	*	*	*
30-34	518	282	1	43	238	77	77	*	59	43	*	57	*
35-39	815	395	37	89	269	212	212	*	67	53	*	75	13
40-44	1,083	366	*	98	268	323	221	102	300	58	23	10	3
45-49	594	302	*	99	203	121	119	2	82	46	*	43	*
50-54	350	221	*	2	219	21	21	*	2	33	18	55	*
55-59	229	86	*	33	53	34	21	13	48	*	38	23	*
60-64	138	50	*	13	37	42	28	14	27	14	*	5	*
65-69	28	*	*	*	*	*	*	*	*	28	*	*	*
70 OR OVER	13	*	*	*	*	*	*	*	*	13	*	*	*
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER ENGINEERS													
TOTAL	13,557	5,621	781	3,271	1,569	3,329	2,093	1,236	2,133	1,072	324	851	227
UNDER 30	214	73	27	32	14	*	*	*	79	62	*	*	*
30-34	1,525	986	76	559	351	169	71	98	199	44	59	68	*
35-39	2,322	1,187	169	748	270	494	412	82	340	94	44	141	22
40-44	3,067	1,486	316	675	495	802	560	242	289	306	27	157	*
45-49	2,387	780	19	554	207	541	290	251	458	237	143	174	54
50-54	1,688	519	80	337	102	614	342	272	262	80	19	148	46
55-59	1,118	302	66	181	55	363	253	110	266	81	13	44	49
60-64	762	207	28	158	21	263	130	133	142	78	*	59	13
65-69	425	67	*	13	54	83	35	48	98	90	13	59	15
70 OR OVER	49	14	*	14	*	*	*	*	*	*	6	1	28
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*

* NO CASES REPORTED

SOURCE: NATIONAL SCIENCE FOUNDATION

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TABLE B-8. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, RACE, AND PRIMARY WORK ACTIVITY: 1983

FIELD AND RACE	TOTAL EMPL.	RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN			TEACH-ING	CON-SULT-ING	SALES/ PROF. SER-VICES	OTHER	NO REPORT
		TOTAL	BASIC RE-SEARCH	APPL'D RE-SEARCH	DEVEL-OPMENT	TOTAL	OF R&D	OF OTHER					
ALL FIELDS													
TOTAL	369,320	124,788	57,137	47,374	20,277	61,813	31,418	30,395	108,236	12,746	29,820	24,163	7,754
WHITE	328,455	106,717	50,769	39,527	16,421	56,696	28,505	28,191	97,604	11,281	28,003	22,276	5,878
BLACK	4,948	998	498	393	107	1,134	251	883	1,800	158	442	202	214
AM.INDIAN/ALSKN NATIVE	418	119	74	31	14	45	10	35	195	14	25	10	10
ASIAN/PACIFIC ISLANDER	29,740	15,409	5,089	6,798	3,522	3,013	2,262	751	7,043	995	885	1,406	989
OTHER	202	53	25	27	1	24	20	4	92	11	13	6	3
NO REPORT	5,557	1,492	682	598	212	901	370	531	1,502	287	452	263	660
SCIENTISTS													
TOTAL	307,775	100,042	54,038	35,490	10,514	46,321	20,881	25,440	96,403	8,999	28,568	20,435	7,007
WHITE	278,722	88,671	48,297	31,169	9,205	43,037	19,277	23,760	87,544	8,295	26,870	19,033	5,272
BLACK	4,538	834	490	291	53	1,018	230	788	1,727	131	439	178	211
AM.INDIAN/ALSKN NATIVE	379	106	74	20	12	29	*	29	192	7	25	10	10
ASIAN/PACIFIC ISLANDER	19,259	9,148	4,520	3,566	1,062	1,509	1,056	453	5,622	349	769	978	884
OTHER	199	50	25	24	1	24	20	4	92	11	13	6	3
NO REPORT	4,678	1,233	632	420	181	704	298	406	1,226	206	452	230	627
PHYSICAL SCIENTISTS													
TOTAL	63,986	29,053	14,049	11,520	3,484	11,845	8,793	3,052	14,652	925	1,641	4,528	1,342
WHITE	56,521	24,892	12,332	9,625	2,935	10,911	8,096	2,815	13,197	821	1,561	4,182	957
BLACK	690	234	157	46	31	177	116	61	245	2	12	11	9
AM.INDIAN/ALSKN NATIVE	67	44	40	2	2	*	*	*	23	*	*	*	*
ASIAN/PACIFIC ISLANDER	5,684	3,414	1,268	1,743	403	614	525	89	969	79	66	315	227
OTHER	22	1	*	1	*	18	18	*	1	*	*	2	*
NO REPORT	1,002	468	252	103	113	125	38	87	217	23	2	18	149
CHEMISTS													
TOTAL	41,298	17,985	7,901	7,629	2,455	8,258	6,533	1,725	8,995	654	1,173	3,539	694
WHITE	36,282	15,076	6,985	6,094	1,997	7,654	6,040	1,614	8,117	571	1,124	3,236	504
BLACK	448	128	71	32	25	123	90	33	179	2	6	10	*
AM.INDIAN/ALSKN NATIVE	42	42	38	2	2	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	3,865	2,463	690	1,412	361	385	348	37	552	58	41	273	93
OTHER	21	1	*	1	*	17	17	*	1	*	*	2	*
NO REPORT	640	275	117	88	70	79	38	41	146	23	2	18	97
PHYSICISTS/ASTRONOMERS													
TOTAL	22,688	11,068	6,148	3,891	1,029	3,587	2,260	1,327	5,657	271	468	989	648
WHITE	20,239	9,816	5,347	3,531	938	3,257	2,056	1,201	5,080	250	437	946	453
BLACK	242	106	86	14	6	54	26	28	66	*	6	1	9
AM.INDIAN/ALSKN NATIVE	25	2	2	*	*	*	*	*	23	*	*	*	*
ASIAN/PACIFIC ISLANDER	1,819	951	578	331	42	229	177	52	417	21	25	42	134
OTHER	1	*	*	*	*	1	1	*	*	*	*	*	*
NO REPORT	362	193	135	15	43	46	*	46	71	*	*	*	52
MATHEMATICAL SCIENTISTS													
TOTAL	16,379	3,403	1,767	1,146	490	1,496	531	965	9,701	599	261	327	592
WHITE	14,531	3,043	1,550	1,031	462	1,325	433	892	8,658	531	210	305	459
BLACK	178	32	17	15	*	45	21	24	93	8	*	*	*
AM.INDIAN/ALSKN NATIVE	6	*	*	*	*	*	*	*	4	*	*	*	2
ASIAN/PACIFIC ISLANDER	1,378	286	167	98	21	77	40	37	843	46	51	20	55
OTHER	2	2	*	2	*	*	*	*	*	*	*	*	*
NO REPORT	284	40	33	*	7	49	37	12	103	14	*	2	76
MATHEMATICIANS													
TOTAL	13,589	2,809	1,608	790	411	1,128	258	870	8,324	296	237	247	548
WHITE	12,212	2,497	1,392	711	394	1,055	227	828	7,579	248	190	228	415
BLACK	153	22	17	5	*	38	17	21	85	8	*	*	*
AM.INDIAN/ALSKN NATIVE	4	*	*	*	*	*	*	*	2	*	*	*	2
ASIAN/PACIFIC ISLANDER	976	250	166	74	10	23	14	9	558	26	47	17	55
OTHER	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	244	40	33	*	7	12	*	12	100	14	*	2	76
STATISTICIANS													
TOTAL	2,790	594	159	356	79	368	273	95	1,377	303	24	80	44
WHITE	2,319	546	158	320	68	270	206	64	1,079	283	20	77	44
BLACK	25	10	*	10	*	7	4	3	8	*	*	*	*
AM.INDIAN/ALSKN NATIVE	2	*	*	*	*	*	*	*	2	*	*	*	*
ASIAN/PACIFIC ISLANDER	402	36	1	24	11	54	26	28	285	20	4	3	*
OTHER	2	2	*	2	*	*	*	*	*	*	*	*	*
NO REPORT	40	*	*	*	*	37	37	*	3	*	*	*	*
COMPUTER/INFORMATION SPECIALISTS													
TOTAL	12,164	5,400	615	893	3,892	2,052	1,114	938	2,361	678	375	1,181	117
WHITE	11,012	4,793	580	825	3,388	1,931	1,028	903	2,095	660	365	1,062	106
BLACK	43	16	*	8	8	12	3	9	4	1	4	*	6
AM.INDIAN/ALSKN NATIVE	3	3	*	*	3	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	944	541	32	58	451	77	68	9	254	9	6	55	2
OTHER	6	*	*	*	*	2	*	2	4	*	*	*	*
NO REPORT	156	47	3	2	42	30	15	15	4	8	*	64	3
ENVIRONMENTAL SCIENTISTS													
TOTAL	16,467	6,728	3,287	3,112	329	3,129	1,825	1,304	3,435	1,198	242	1,445	290
WHITE	15,476	6,263	3,100	2,867	296	3,006	1,726	1,280	3,275	1,146	235	1,341	210
BLACK	33	22	6	16	*	*	*	*	8	*	*	3	*
AM.INDIAN/ALSKN NATIVE	11	10	8	2	*	*	*	*	1	*	*	*	*
ASIAN/PACIFIC ISLANDER	770	346	135	196	15	105	87	18	109	37	7	95	71
OTHER	18	11	7	4	*	*	*	*	*	*	*	4	3
NO REPORT	159	76	31	27	18	18	12	6	42	15	*	2	6
EARTH SCIENTISTS													
TOTAL	12,523	4,355	1,852	2,257	246	2,480	1,270	1,210	2,918	1,073	199	1,269	229
WHITE	11,733	4,017	1,744	2,059	214	2,387	1,194	1,193	2,795	1,026	194	1,165	149
BLACK	29	20	4	16	*	*	*	*	6	*	*	3	*
AM.INDIAN/ALSKN NATIVE	9	8	6	2	*	*	*	*	1	*	*	*	*
ASIAN/PACIFIC ISLANDER	627	273	93	166	14	75	64	11	76	32	5	95	71
OTHER	11	4	*	4	*	*	*	*	*	*	*	4	3
NO REPORT	114	33	5	10	18	18	12	6	40	15	*	2	6

* NO CASES REPORTED

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TABLE B-8. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, RACE, AND PRIMARY WORK ACTIVITY: 1983
CONTINUED

FIELD AND RACE	TOTAL EMPL	RESEARCH AND DEVELOPMENT TOTAL	BASIC RE-SEARCH	APPL'D RE-SEARCH	DEVEL-OPMENT	MANAGEMENT OR ADMIN TOTAL	OF R&D	OF OTHER	TEACH-ING	CON-SULT-ING	SALES/ PROF. SER-VICES	OTHER	NO REPORT
OCEANOGRAPHERS													
TOTAL....................	1,742	1,030	771	243	16	311	257	54	188	46	43	72	52
WHITE....................	1,670	1,010	758	236	16	283	236	47	166	46	41	72	52
BLACK....................	2	*	*	*	*	*	*	*	2	*	*	*	*
AM.INDIAN/ALSKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	61	11	6	5	*	28	21	7	20	*	2	*	*
OTHER....................	7	7	7	*	*	*	*	*	*	*	*	*	*
NO REPORT.............	2	2	*	2	*	*	*	*	*	*	*	*	*
ATMOSPHERIC SCIENTISTS													
TOTAL....................	2,202	1,343	664	612	67	338	298	40	329	79	*	104	9
WHITE....................	2,073	1,236	598	572	66	336	296	40	314	74	*	104	9
BLACK....................	2	2	2	*	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	2	2	2	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	82	62	36	25	1	2	2	*	13	5	*	*	*
OTHER....................	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT.............	43	41	26	15	*	*	*	*	2	*	*	*	*
LIFE SCIENTISTS													
TOTAL....................	92,802	41,023	28,784	10,707	1,532	12,971	6,165	6,806	22,452	1,981	6,223	5,566	2,586
WHITE....................	83,378	36,268	25,515	9,387	1,366	11,967	5,692	6,275	20,355	1,822	5,732	5,252	1,982
BLACK....................	1,142	279	208	67	4	320	56	264	358	35	47	62	41
AM.INDIAN/ALSKN NATIVE	84	41	26	12	3	6	*	6	20	*	12	*	5
ASIAN/PACIFIC ISLANDER	6,750	4,015	2,783	1,074	158	438	293	145	1,347	59	318	216	357
OTHER....................	84	30	18	11	1	2	2	*	43	9	*	*	*
NO REPORT.............	1,364	390	234	156	*	238	122	116	329	56	114	36	201
BIOLOGICAL SCIENTISTS													
TOTAL....................	55,205	28,080	23,129	4,312	639	5,875	2,835	3,040	15,156	886	1,139	2,504	1,565
WHITE....................	49,475	24,827	20,538	3,700	589	5,384	2,557	2,827	13,729	829	1,103	2,339	1,264
BLACK....................	642	187	157	30	*	117	35	82	268	6	2	31	31
AM.INDIAN/ALSKN NATIVE	33	21	19	2	*	4	*	4	5	*	3	*	*
ASIAN/PACIFIC ISLANDER	4,218	2,733	2,207	476	50	198	155	43	943	20	31	112	181
OTHER....................	21	15	15	*	*	2	2	*	4	*	*	*	*
NO REPORT.............	816	297	193	104	*	170	86	84	207	31	*	22	89
AGRICULTURAL SCIENTISTS													
TOTAL....................	14,536	6,213	1,653	4,200	360	2,833	1,609	1,224	2,489	465	617	1,498	421
WHITE....................	13,432	5,638	1,507	3,816	315	2,642	1,481	1,161	2,327	414	603	1,450	358
BLACK....................	63	29	6	22	1	13	1	12	11	3	2	*	5
AM.INDIAN/ALSKN NATIVE	34	20	7	10	3	2	*	2	12	*	*	*	*
ASIAN/PACIFIC ISLANDER	812	463	133	289	41	141	110	31	100	22	12	46	28
OTHER....................	20	11	*	11	*	*	*	*	*	9	*	*	*
NO REPORT.............	175	52	*	52	*	35	17	18	39	17	*	2	30
MEDICAL SCIENTISTS													
TOTAL....................	23,061	6,730	4,002	2,195	533	4,263	1,721	2,542	4,807	630	4,467	1,564	600
WHITE....................	20,471	5,803	3,470	1,871	462	3,941	1,654	2,287	4,299	579	4,026	1,463	360
BLACK....................	437	63	45	15	3	190	20	170	79	26	43	31	5
AM.INDIAN/ALSKN NATIVE	17	*	*	*	*	*	*	*	3	*	9	*	5
ASIAN/PACIFIC ISLANDER	1,720	819	443	309	67	99	28	71	304	17	275	58	148
OTHER....................	43	4	3	*	1	*	*	*	39	*	*	*	*
NO REPORT.............	373	41	41	*	*	33	19	14	83	8	114	12	82
PSYCHOLOGISTS													
TOTAL....................	46,645	5,017	2,344	2,360	313	[illegible]	903	4,705	12,708	2,084	18,488	2,081	659
WHITE....................	44,237	4,855	2,275	2,274	306	[illegible]	797	4,478	12,075	1,951	17,609	1,921	551
BLACK....................	983	73	15	58	*	137	8	129	314	60	346	31	22
AM.INDIAN/ALSKN NATIVE	73	2	*	*	2	14	*	14	34	7	13	*	3
ASIAN/PACIFIC ISLANDER	640	58	32	22	4	56	32	24	196	34	103	89	24
OTHER....................	29	6	*	6	*	2	*	2	8	*	13	*	*
NO REPORT.............	683	23	22	*	1	124	66	58	81	32	324	40	59
SOCIAL SCIENTISTS													
TOTAL....................	59,332	9,418	3,192	5,752	474	9,220	1,550	7,670	31,094	1,534	1,338	5,307	1,421
WHITE....................	53,567	8,557	2,945	5,160	452	8,622	1,505	7,117	27,889	1,364	1,158	4,970	1,007
BLACK....................	1,469	178	87	81	10	327	26	301	705	25	30	71	133
AM.INDIAN/ALSKN NATIVE	135	6	*	4	2	9	*	9	110	*	*	10	*
ASIAN/PACIFIC ISLANDER	3,093	488	103	375	10	142	11	131	1,904	85	138	188	148
OTHER....................	38	*	*	*	*	*	*	*	36	2	*	*	*
NO REPORT.............	1,030	189	57	132	*	120	8	112	450	58	12	68	133
ECONOMISTS													
TOTAL....................	16,958	3,911	824	2,947	140	2,443	488	1,955	7,803	781	387	1,393	240
WHITE....................	15,016	3,377	712	2,527	138	2,336	483	1,853	6,941	646	376	1,231	109
BLACK....................	290	88	52	36	*	91	5	86	51	12	*	20	28
AM.INDIAN/ALSKN NATIVE	60	3	*	3	*	*	*	*	57	*	*	*	*
ASIAN/PACIFIC ISLANDER	1,285	373	60	311	2	5	*	5	642	65	11	103	86
OTHER....................	17	*	*	*	*	*	*	*	17	*	*	*	*
NO REPORT.............	290	70	*	70	*	11	*	11	95	58	*	39	17
SOCIOLOGISTS/ANTHRO.													
TOTAL....................	12,056	1,823	1,056	760	7	1,228	67	1,161	7,565	141	243	730	326
WHITE....................	11,076	1,738	1,025	710	3	1,144	59	1,085	6,879	139	234	694	248
BLACK....................	378	34	5	29	*	49	8	41	214	*	*	20	61
AM.INDIAN/ALSKN NATIVE	34	3	*	1	2	5	*	5	26	*	*	*	*
ASIAN/PACIFIC ISLANDER	416	22	3	17	2	4	*	4	381	*	2	7	*
OTHER....................	19	*	*	*	*	*	*	*	17	2	*	*	*
NO REPORT.............	133	26	23	3	*	26	*	26	48	*	7	9	17
OTHER SOCIAL SCIENTISTS													
TOTAL....................	30,318	3,684	1,312	2,045	327	5,549	995	4,554	15,726	612	708	3,184	855
WHITE....................	27,475	3,442	1,208	1,923	311	5,142	963	4,179	14,069	579	548	3,045	650
BLACK....................	801	56	30	16	10	187	13	174	440	13	30	31	44
AM.INDIAN/ALSKN NATIVE	41	*	*	*	*	4	*	4	27	*	*	10	*
ASIAN/PACIFIC ISLANDER	1,392	93	40	47	6	133	11	122	881	20	125	78	62
OTHER....................	2	*	*	*	*	*	*	*	2	*	*	*	*
NO REPORT.............	607	93	34	59	*	83	8	75	307	*	5	20	99

* NO CASES REPORTED

TABLE B-8. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, RACE, AND PRIMARY WORK ACTIVITY: 1983
CONTINUED

		RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN							
FIELD AND RACE	TOTAL EMPL	TOTAL	BASIC RE-SEARCH	APPL'D RE-SEARCH	DEVEL-OPMENT	TOTAL	OF R&D	OF OTHER	TEACH-ING	CON-SULT-ING	SALES/PROF. SER-VICES	OTHER	NO REPORT
ENGINEERS													
TOTAL	61,545	24,746	3,099	11,884	9,763	15,492	10,537	4,955	11,833	3,747	1,252	3,728	747
WHITE	49,733	18,046	2,472	8,358	7,216	13,659	9,228	4,431	10,060	2,986	1,133	3,243	606
BLACK	410	164	8	102	54	116	21	95	73	27	3	24	3
AM.INDIAN/ALSKN NATIVE	39	13	*	11	2	16	10	6	3	7	*	*	*
ASIAN/PACIFIC ISLANDER	10,481	6,261	569	3,232	2,460	1,504	1,206	298	1,421	646	116	428	105
OTHER	3	3	*	3	*	*	*	*	*	*	*	*	*
NO REPORT	879	259	50	178	31	197	72	125	276	81	*	33	33
AERO/ASTRO ENGINEERS													
TOTAL	3,684	1,800	273	721	806	954	798	156	517	138	79	196	*
WHITE	3,128	1,363	262	518	583	902	748	154	470	138	79	176	*
BLACK	21	13	*	10	3	*	*	*	*	*	*	8	*
AM.INDIAN/ALSKN NATIVE	1	*	*	*	*	1	1	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	482	424	11	193	220	32	30	2	14	*	*	12	*
OTHER	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	52	*	*	*	*	19	19	*	33	*	*	*	*
CHEMICAL ENGINEERS													
TOTAL	6,992	2,968	374	1,680	914	1,697	1,110	587	1,078	227	185	775	62
WHITE	5,384	2,053	324	1,093	636	1,403	875	528	825	183	159	703	58
BLACK	13	12	*	12	*	*	*	*	*	*	*	1	*
AM.INDIAN/ALSKN NATIVE	2	*	*	*	*	*	*	*	2	*	*	*	*
ASIAN/PACIFIC ISLANDER	1,502	900	50	572	278	220	220	*	251	30	26	71	4
OTHER	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	91	3	*	3	*	74	15	59	*	14	*	*	*
CIVIL ENGINEERS													
TOTAL	5,317	898	189	391	318	778	180	598	2,132	934	113	360	102
WHITE	4,190	654	189	267	198	682	137	545	1,858	521	106	282	87
BLACK	24	2	*	2	*	5	3	2	5	2	*	7	3
AM.INDIAN/ALSKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	1,059	242	*	122	120	91	40	51	225	411	7	71	12
OTHER	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	44	*	*	*	*	*	*	*	44	*	*	*	*
ELEC./ELECTRON. ENGINEERS													
TOTAL	12,696	5,006	330	2,125	2,551	3,961	2,817	1,144	2,447	380	247	408	247
WHITE	10,310	3,548	215	1,411	1,922	3,487	2,464	1,023	2,077	356	240	403	199
BLACK	75	18	*	11	7	6	6	*	51	*	*	*	*
AM.INDIAN/ALSKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	2,093	1,423	115	703	605	387	332	55	199	24	7	5	48
OTHER	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	218	17	*	*	17	81	15	66	120	*	*	*	*
MATERIALS SCI. ENGINEERS													
TOTAL	7,422	3,591	936	2,007	648	2,308	1,947	361	799	141	122	438	23
WHITE	6,077	2,703	639	1,523	541	2,029	1,683	346	676	133	117	419	*
BLACK	18	8	2	*	6	5	5	*	*	*	3	2	*
AM.INDIAN/ALSKN NATIVE	16	9	*	9	*	7	7	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	1,242	821	245	475	101	267	252	15	104	8	2	17	23
OTHER	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	69	50	50	*	*	*	*	*	19	*	*	*	*
MECHANICAL ENGINEERS													
TOTAL	5,657	1,891	156	680	1,055	1,088	597	491	1,867	342	65	377	27
WHITE	4,382	1,319	97	559	663	869	503	366	1,513	299	65	290	27
BLACK	91	6	6	*	*	78	*	78	7	*	*	*	*
AM.INDIAN/ALSKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	1,157	539	53	94	392	141	94	47	347	43	*	87	*
OTHER	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	27	27	*	27	*	*	*	*	*	*	*	*	*
NUCLEAR ENGINEERS													
TOTAL	2,329	1,146	22	588	536	547	296	251	275	225	38	55	43
WHITE	1,882	853	22	404	427	431	265	166	248	218	36	53	43
BLACK	9	2	*	2	*	7	7	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	382	269	*	160	109	109	24	85	*	*	2	2	*
OTHER	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	56	22	*	22	*	*	*	*	27	7	*	*	*
SYSTEMS DESIGN ENGINEERS													
TOTAL	3,891	1,825	38	421	1,366	830	699	131	585	288	79	268	16
WHITE	3,471	1,614	38	368	1,208	779	671	108	483	275	79	228	13
BLACK	21	13	*	3	10	*	*	*	2	2	*	4	*
AM.INDIAN/ALSKN NATIVE	6	4	*	2	2	2	2	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	332	166	*	34	132	49	26	23	100	11	*	3	3
OTHER	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	61	28	*	14	14	*	*	*	*	*	*	33	*
OTHER ENGINEERS													
TOTAL	13,557	5,621	781	3,271	1,569	3,329	2,093	1,236	2,133	1,072	324	851	227
WHITE	10,909	3,939	686	2,215	1,038	3,077	1,882	1,195	1,910	863	252	609	179
BLACK	138	90	*	62	28	15	*	15	8	23	*	2	*
AM.INDIAN/ALSKN NATIVE	14	*	*	*	*	6	*	6	1	7	*	*	*
ASIAN/PACIFIC ISLANDER	2,232	1,477	95	879	503	208	188	20	181	119	72	160	15
OTHER	3	3	*	3	*	*	*	*	*	*	*	*	*
NO REPORT	261	112	*	112	*	23	23	*	33	60	*	*	33

* NO CASES REPORTED

SOURCE: NATIONAL SCIENCE FOUNDATION

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TABLE B-6A. NUMBER OF EMPLOYED HISPANIC DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, SEX, AND PRIMARY WORK ACTIVITY: 1983

FIELD AND SEX	TOTAL EMPL	RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN			TEACH-ING	CON-SULT-ING	SALES/PROF. SER-VICES	OTHER	NO REPORT
		TOTAL	BASIC RE-SEARCH	APPL'D RE-SEARCH	DEVEL-OPMENT	TOTAL	OF R&D	OF OTHER					
ALL FIELDS													
TOTAL	5,365	1,933	980	706	247	698	269	429	1,517	242	511	311	153
MEN	4,668	1,752	869	657	226	607	247	360	1,275	232	388	283	131
WOMEN	697	181	111	49	21	91	22	69	242	10	123	28	22
SCIENTISTS													
TOTAL	4,429	1,597	927	534	136	616	213	403	1,143	197	470	253	153
MEN	3,751	1,432	819	492	121	528	194	334	901	187	347	225	131
WOMEN	678	165	108	42	15	88	19	69	242	10	123	28	22
PHYSICAL SCIENTISTS													
TOTAL	881	335	163	121	51	134	126	8	282	35	15	51	29
MEN	816	306	140	115	51	130	124	6	254	35	15	47	29
WOMEN	65	29	23	6	*	4	2	2	28	*	*	4	*
CHEMISTS													
TOTAL	674	216	125	42	49	120	114	6	214	35	15	45	29
MEN	617	191	104	38	49	116	112	4	190	35	15	41	29
WOMEN	57	25	21	4	*	4	2	2	24	*	*	4	*
PHYSICISTS/ASTRONOMERS													
TOTAL	207	119	38	79	2	14	12	2	66	*	*	6	*
MEN	199	115	36	77	2	14	12	2	64	*	*	6	*
WOMEN	8	4	2	2	*	*	*	*	4	*	*	*	*
MATHEMATICAL SCIENTISTS													
TOTAL	198	44	34	10	*	31	3	28	105	*	3	13	2
MEN	171	42	34	8	*	31	3	28	80	*	3	13	2
WOMEN	27	2	*	2	*	*	*	*	25	*	*	*	*
MATHEMATICIANS													
TOTAL	189	44	34	10	*	31	3	28	99	*	*	13	2
MEN	165	42	34	8	*	31	3	28	77	*	*	13	2
WOMEN	24	2	*	2	*	*	*	*	22	*	*	*	*
STATISTICIANS													
TOTAL	9	*	*	*	*	*	*	*	6	*	3	*	*
MEN	6	*	*	*	*	*	*	*	3	*	3	*	*
WOMEN	3	*	*	*	*	*	*	*	3	*	*	*	*
COMPUTER/INFORMATION SPECIALISTS													
TOTAL	232	75	6	41	28	58	7	51	64	2	*	33	*
MEN	223	73	6	39	28	54	5	49	64	2	*	30	*
WOMEN	9	2	*	2	*	4	2	2	*	*	*	3	*
ENVIRONMENTAL SCIENTISTS													
TOTAL	198	128	86	19	23	14	1	13	42	9	*	5	*
MEN	182	119	77	19	23	12	1	11	38	9	*	4	*
WOMEN	16	9	9	*	*	2	*	2	4	*	*	1	*
EARTH SCIENTISTS													
TOTAL	152	90	51	17	22	11	1	10	37	9	*	5	*
MEN	148	90	51	17	22	11	1	10	34	9	*	4	*
WOMEN	4	*	*	*	*	*	*	*	3	*	*	1	*
OCEANOGRAPHERS													
TOTAL	18	15	13	2	*	1	*	1	2	*	*	*	*
MEN	9	6	4	2	*	1	*	1	2	*	*	*	*
WOMEN	9	9	9	*	*	*	*	*	*	*	*	*	*
ATMOSPHERIC SCIENTISTS													
TOTAL	28	23	22	*	1	2	*	2	3	*	*	*	*
MEN	25	23	22	*	1	*	*	*	2	*	*	*	*
WOMEN	3	*	*	*	*	2	*	2	1	*	*	*	*
LIFE SCIENTISTS													
TOTAL	1,267	678	498	156	24	183	70	113	142	26	130	49	59
MEN	1,066	591	434	145	12	162	61	101	88	24	116	39	46
WOMEN	201	87	64	11	12	21	9	12	54	2	14	10	13
BIOLOGICAL SCIENTISTS													
TOTAL	674	440	391	37	12	84	26	58	78	*	14	10	48
MEN	562	385	340	33	12	72	22	50	51	*	10	5	39
WOMEN	112	55	51	4	*	12	4	8	27	*	4	5	9
AGRICULTURAL SCIENTISTS													
TOTAL	271	140	19	116	5	56	36	20	11	17	11	29	7
MEN	252	128	16	112	*	50	33	17	10	17	11	29	7
WOMEN	19	12	3	4	5	6	3	3	1	*	*	*	*
MEDICAL SCIENTISTS													
TOTAL	322	98	88	3	7	43	8	35	53	9	105	10	4
MEN	252	78	78	*	*	40	6	34	27	7	95	5	*
WOMEN	70	20	10	3	7	3	2	1	26	2	10	5	4
PSYCHOLOGISTS													
TOTAL	699	71	25	41	5	90	4	86	123	73	306	20	16
MEN	501	55	22	29	4	60	*	60	80	70	206	20	10
WOMEN	198	16	3	12	1	30	4	26	43	3	100	*	6
SOCIAL SCIENTISTS													
TOTAL	954	266	115	146	5	106	2	104	385	52	16	82	47
MEN	792	246	106	137	3	79	*	79	297	47	7	72	44
WOMEN	162	20	9	9	2	27	2	25	88	5	9	10	3
ECONOMISTS													
TOTAL	332	185	96	89	*	23	*	23	46	45	*	33	*
MEN	297	176	93	83	*	23	*	23	29	40	*	29	*
WOMEN	35	9	3	6	*	*	*	*	17	5	*	4	*
SOCIOLOGISTS/ANTHRO.													
TOTAL	174	29	7	17	5	11	*	11	118	*	7	9	*
MEN	133	24	7	14	3	9	*	9	84	*	7	9	*
WOMEN	41	5	*	3	2	2	*	2	34	*	*	*	*

* NO CASES REPORTED

TABLE B-6A. NUMBER OF EMPLOYED HISPANIC DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, SEX, AND PRIMARY WORK ACTIVITY: 1983
CONTINUED

		RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN							
FIELD AND SEX	TOTAL EMPL	TOTAL	BASIC RE-SEARCH	APPL'D RE-SEARCH	DEVEL-OPMENT	TOTAL	OF R&D	OF OTHER	TEACH-ING	CON-SULT-ING	SALES/ PROF. SER-VICES	OTHER	NO REPORT
OTHER SOCIAL SCIENTISTS													
TOTAL	448	52	12	40	*	72	2	70	221	7	9	40	47
MEN	362	46	6	40	*	47	*	47	184	7	*	34	44
WOMEN	86	6	6	*	*	25	2	23	37	*	9	6	3
ENGINEERS													
TOTAL	936	336	53	172	111	82	56	26	374	45	41	58	*
MEN	917	320	50	165	105	79	53	26	374	45	41	58	*
WOMEN	19	16	3	7	6	3	3	*	*	*	*	*	*
AERO/ASTRO ENGINEERS													
TOTAL	3	*	*	*	*	3	3	*	*	*	*	*	*
MEN	3	*	*	*	*	3	3	*	*	*	*	*	*
WOMEN	*	*	*	*	*	*	*	*	*	*	*	*	*
CHEMICAL ENGINEERS													
TOTAL	114	33	*	29	4	6	*	6	59	*	*	16	*
MEN	111	30	*	26	4	6	*	6	59	*	*	16	*
WOMEN	3	3	*	3	*	*	*	*	*	*	*	*	*
CIVIL ENGINEERS													
TOTAL	72	12	*	12	*	3	3	*	26	22	*	9	*
MEN	72	12	*	12	*	3	3	*	26	22	*	9	*
WOMEN	*	*	*	*	*	*	*	*	*	*	*	*	*
ELEC./ELECTRON. ENGINEERS													
TOTAL	216	48	*	23	25	26	6	20	142	*	*	*	*
MEN	210	45	*	22	23	23	3	20	142	*	*	*	*
WOMEN	6	3	*	1	2	3	3	*	*	*	*	*	*
MATERIALS SCI. ENGINEERS													
TOTAL	167	147	50	92	5	9	9	*	9	2	*	*	*
MEN	164	144	50	89	5	9	9	*	9	2	*	*	*
WOMEN	3	3	*	3	*	*	*	*	*	*	*	*	*
MECHANICAL ENGINEERS													
TOTAL	78	60	*	7	53	*	*	*	16	2	*	*	*
MEN	78	60	*	7	53	*	*	*	16	2	*	*	*
WOMEN	*	*	*	*	*	*	*	*	*	*	*	*	*
NUCLEAR ENGINEERS													
TOTAL	9	*	*	*	*	9	9	*	*	*	*	*	*
MEN	9	*	*	*	*	9	9	*	*	*	*	*	*
WOMEN	*	*	*	*	*	*	*	*	*	*	*	*	*
SYSTEMS DESIGN ENGINEERS													
TOTAL	149	18	*	*	18	9	9	*	81	*	41	*	*
MEN	149	18	*	*	18	9	9	*	81	*	41	*	*
WOMEN	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER ENGINEERS													
TOTAL	128	18	3	9	6	17	17	*	41	19	*	33	*
MEN	121	11	*	9	2	17	17	*	41	19	*	33	*
WOMEN	7	7	3	*	4	*	*	*	*	*	*	*	*

* NO CASES REPORTED

SOURCE: NATIONAL SCIENCE FOUNDATION

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TABLE B-9. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, TYPE OF EMPLOYER, AND PRIMARY WORK ACTIVITY: 1983

		RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN							
FIELD AND TYPE OF EMPLOYER	TOTAL EMPL	TOTAL	BASIC RE-SEARCH	APPL'D RE-SEARCH	DEVEL-OPMENT	TOTAL	OF R&D	OF OTHER	TEACH-ING	CON-SULT-ING	SALES/PROF. SER-VICES	OTHER	NO REPORT
ALL FIELDS													
TOTAL EMPLOYED..........	369,320	124,788	57,137	47,374	20,277	61,813	31,418	30,395	108,236	12,746	29,820	24,163	7,754
BUSINESS/INDUSTRY......	113,463	46,525	6,731	23,463	16,33[illegible]	25,528	20,066	5,462	1,301	10,673	15,581	12,303	1,552
EDUCATIONAL INSTITUTION	196,050	54,722	39,530	13,649	1,543	20,726	3,024	17,702	105,850	757	5,271	4,254	4,470
4-YR. COLL./UNIV.....	187,554	54,536	39,443	13,584	1,309	19,522	3,021	16,501	100,452	684	4,050	3,968	4,342
2-YR. COLLEGES.......	5,421	87	70	17	*	593	*	593	4,491	12	88	47	103
ELEM/SEC. SCHOOLS....	3,075	99	17	48	34	611	3	608	907	61	1,133	239	25
HOSPITALS/CLINICS......	10,435	1,536	863	518	155	1,601	281	1,320	174	207	5,502	997	418
NONPROFIT ORGS.........	11,894	5,683	3,002	1,904	777	2.983	1,546	1,437	304	391	1,112	1,237	184
FEDERAL GOVT...........	25,793	13,878	6,388	6,490	1,000	7,160	5,400	1,760	235	383	805	2,941	391
MILITARY/COMM. CORPS...	2,090	317	70	140	107	764	498	266	65	14	393	537	*
STATE GOVT.............	5,142	1,356	465	683	208	1,832	402	1,430	96	186	703	901	68
OTHER GOVT.............	2,575	433	32	245	156	876	65	811	76	113	452	574	51
OTHER..................	1,002	212	27	185	*	275	108	167	68	22	1	417	7
NO REPORT..............	876	126	29	97	*	68	28	40	67	*	*	2	613
SCIENTISTS													
TOTAL EMPLOYED..........	307,775	100,042	54,038	35,490	10,514	46,321	20,881	25,440	96,403	8,999	28,568	20,435	7,007
BUSINESS/INDUSTRY......	78,963	30,221	6,279	15,812	8,130	15,680	12,203	3,477	806	7,146	14,485	9,295	1,250
EDUCATIONAL INSTITUTION	175,730	49,504	37,297	11,203	1,004	17,499	2,352	15,147	94,560	691	5,232	4,115	4,129
4-YR. COLL./UNIV.....	167,305	49,318	37,210	11,138	970	16,295	2,349	13,946	89,233	618	4,011	3,829	4,001
2-YR. COLLEGES.......	5,350	87	70	17	*	593	*	593	4,420	12	88	47	103
ELEM/SEC. SCHOOLS....	[illegible]	99	17	48	34	611	3	608	907	61	1,133	239	25
HOSPITALS/CLINICS......	10,428	1,536	863	518	155	1,594	274	1,320	174	207	5,502	997	418
NONPROFIT ORGS.........	9,973	4,620	2,928	1,325	367	2,444	1,077	1,367	239	276	1,042	1,179	173
FEDERAL GOVT...........	21,950	11,927	6,048	5,389	490	5,749	4,121	1,628	174	349	758	2,637	356
MILITARY/COMM. CORPS...	1,666	243	70	111	62	513	264	249	65	14	393	438	*
STATE GOVT.............	5,048	1,326	465	653	208	1,776	399	1,377	96	186	703	893	68
OTHER GOVT.............	2,286	375	32	245	98	756	55	701	76	113	452	463	51
OTHER..................	961	210	27	183	*	242	108	134	68	17	1	416	7
NO REPORT..............	770	80	29	51	*	68	28	40	65	*	*	2	555
PHYSICAL SCIENTISTS													
TOTAL EMPLOYED..........	63,986	29,053	14,049	11,520	3,484	11,845	8,793	3,052	14,652	925	1,641	4,528	1,342
BUSINESS/INDUSTRY......	28,748	15,431	3,970	8,445	3,016	7,536	6,818	718	213	812	1,258	3,226	272
EDUCATIONAL INSTITUTION	27,931	9,334	7,510	1,551	273	2,754	890	1,864	14,400	9	160	467	807
4-YR. COLL./UNIV.....	26,453	9,334	7,510	1,551	273	2,644	890	1,754	13,044	3	160	467	801
2-YR. COLLEGES.......	1,134	*	*	*	*	101	*	101	1,027	6	*	*	*
ELEM/SEC. SCHOOLS....	344	*	*	*	*	9	*	9	329	*	*	*	6
HOSPITALS/CLINICS......	559	155	49	68	38	122	40	82	5	*	99	138	40
NONPROFIT ORGS.........	1,751	1,025	747	220	58	381	232	149	*	82	62	176	25
FEDERAL GOVT...........	4,307	2,979	1,739	1,180	60	927	740	187	4	22	21	318	36
MILITARY/COMM. CORPS...	205	36	*	36	*	73	59	14	*	*	3	93	*
STATE GOVT.............	158	23	10	6	7	18	10	8	2	*	38	76	1
OTHER GOVT.............	88	46	*	14	32	2	*	2	*	*	*	34	6
OTHER..................	25	24	24	*	*	1	1	*	*	*	*	*	*
NO REPORT..............	214	*	*	*	*	31	3	28	28	*	*	*	155
CHEMISTS													
TOTAL EMPLOYED..........	41,298	17,985	7,901	7,629	2,455	8,258	6,533	1,725	8,995	654	1,173	3,539	694
BUSINESS/INDUSTRY......	22,525	11,788	2,816	6,660	2,312	6,149	5,716	433	192	600	982	2,668	146
EDUCATIONAL INSTITUTION	15,037	4,163	3,822	302	39	1,332	334	998	8,773	6	38	311	414
4-YR. COLL./UNIV.....	13,905	4,163	3,822	302	39	1,250	334	916	7,735	*	38	311	408
2-YR. COLLEGES.......	901	*	*	*	*	77	*	77	818	6	*	*	*
ELEM/SEC. SCHOOLS....	231	*	*	*	*	5	*	5	220	*	*	*	6
HOSPITALS/CLINICS......	398	133	49	68	16	83	18	65	*	*	60	116	6
NONPROFIT ORGS.........	818	421	314	76	31	180	133	47	*	48	44	119	6
FEDERAL GOVT...........	2,054	1,427	890	519	18	421	291	130	*	*	11	195	*
MILITARY/COMM. CORPS...	95	*	*	*	*	41	27	14	*	*	*	54	*
STATE GOVT.............	121	21	10	4	7	18	10	8	2	*	38	42	*
OTHER GOVT.............	72	32	*	*	32	2	*	2	*	*	*	34	4
OTHER..................	1	*	*	*	*	1	1	*	*	*	*	*	*
NO REPORT..............	177	*	*	*	*	31	3	28	28	*	*	*	118
PHYSICISTS/ASTRONOMERS													
TOTAL EMPLOYED..........	22,688	11,068	6,148	3,891	1,029	3,587	2,260	1,327	5,657	271	468	989	648
BUSINESS/INDUSTRY......	6,223	3,643	1,154	1,785	704	1,387	1,102	285	21	212	276	558	126
EDUCATIONAL INSTITUTION	12,894	5,171	3,688	1,249	234	1,422	556	866	5,627	3	122	156	393
4-YR. COLL./UNIV.....	12,548	5,171	3,688	1,249	234	1,394	556	838	5,309	3	122	156	393
2-YR. COLLEGES.......	233	*	*	*	*	24	*	24	209	*	*	*	*
ELEM/SEC. SCHOOLS....	113	*	*	*	*	4	*	4	109	*	*	*	*
HOSPITALS/CLINICS......	161	22	*	*	22	39	22	17	5	*	39	22	34
NONPROFIT ORGS.........	933	604	433	144	27	201	99	102	*	34	18	57	19
FEDERAL GOVT...........	2,253	1,552	849	661	42	506	449	57	4	22	10	123	36
MILITARY/COMM. CORPS...	110	36	*	36	*	32	32	*	*	*	3	39	*
STATE GOVT.............	37	2	*	2	*	*	*	*	*	*	*	34	1
OTHER GOVT.............	16	14	*	14	*	*	*	*	*	*	*	*	2
OTHER..................	24	24	24	*	*	*	*	*	*	*	*	*	*
NO REPORT..............	37	*	*	*	*	*	*	*	*	*	*	*	37
MATHEMATICAL SCIENTISTS													
TOTAL EMPLOYED..........	16,379	3,403	1,767	1,146	490	1,496	531	965	9,701	599	261	327	592
BUSINESS/INDUSTRY......	2,027	874	34	459	301	266	205	61	53	468	184	119	63
EDUCATIONAL INSTITUTION	13,244	2,051	1,659	348	44	894	57	837	9,648	79	37	73	462
4-YR. COLL./UNIV.....	12,770	2,051	1,659	348	44	869	57	812	9,214	79	23	73	461
2-YR. COLLEGES.......	318	*	*	*	*	23	*	23	295	*	*	*	*
ELEM/SEC. SCHOOLS....	156	*	*	*	*	2	*	2	139	*	14	*	1
HOSPITALS/CLINICS......	*	*	*	*	*	*	*	*	*	*	*	*	*
NONPROFIT ORGS.........	211	74	13	58	3	48	36	12	*	29	3	45	12
FEDERAL GOVT...........	790	373	32	279	62	262	217	45	*	23	37	64	31
MILITARY/COMM. CORPS...	33	2	*	2	*	16	16	*	*	*	*	15	*
STATE GOVT.............	21	*	*	*	*	10	*	10	*	*	*	11	*
OTHER GOVT.............	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER..................	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT..............	53	29	29	*	*	*	*	*	*	*	*	*	24

* NO CASES REPORTED

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TABLE B-9. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, TYPE OF EMPLOYER, AND PRIMARY WORK ACTIVITY: 1983
CONTINUED

		RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN							
FIELD AND TYPE OF EMPLOYER	TOTAL EMPL	TOTAL	BASIC RE-SEARCH	APPL'D RE-SEARCH	DEVEL-OPMENT	TOTAL	OF R&D	OF OTHER	TEACH-ING	CON-SULT-ING	SALES/PROF. SER-VICES	OTHER	NO REPORT
MATHEMATICIANS													
TOTAL EMPLOYED	13,589	2,809	1,608	790	411	1,128	258	870	8,324	296	237	247	548
BUSINESS/INDUSTRY	1,512	706	33	347	326	154	110	44	53	281	177	85	56
EDUCATIONAL INSTITUTION	11,365	1,702	1,501	170	31	825	38	787	8,271	11	37	73	446
4-YR. COLL./UNIV.	10,891	1,702	1,501	170	31	800	38	762	7,837	11	23	73	445
2-YR. COLLEGES	318	*	*	*	*	23	*	23	295	*	*	*	*
ELEM/SEC. SCHOOLS	156	*	*	*	*	2	*	2	139	*	14	*	1
HOSPITALS/CLINICS	*	*	*	*	*	*	*	*	*	*	*	*	*
NONPROFIT ORGS.	106	32	13	17	2	12	*	12	*	2	3	45	12
FEDERAL GOVT.	499	338	32	254	52	111	94	17	*	2	20	18	10
MILITARY/COMM. CORPS	33	2	*	2	*	16	16	*	*	*	*	15	*
STATE GOVT.	21	*	*	*	*	10	*	10	*	*	*	11	*
OTHER GOVT.	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	53	29	29	*	*	*	*	*	*	*	*	*	24
STATISTICIANS													
TOTAL EMPLOYED	2,790	594	159	356	79	368	273	95	1,377	303	24	80	44
BUSINESS/INDUSTRY	515	168	1	112	55	112	95	17	*	187	7	34	7
EDUCATIONAL INSTITUTION	1,879	349	158	178	13	69	19	50	1,377	68	*	*	16
4-YR. COLL./UNIV.	1,879	349	158	178	13	69	19	50	1,377	68	*	*	16
2-YR. COLLEGES	*	*	*	*	*	*	*	*	*	*	*	*	*
ELEM/SEC. SCHOOLS	*	*	*	*	*	*	*	*	*	*	*	*	*
HOSPITALS/CLINICS	*	*	*	*	*	*	*	*	*	*	*	*	*
NONPROFIT ORGS.	105	42	*	41	1	36	36	*	*	27	*	*	*
FEDERAL GOVT.	291	35	*	25	10	151	123	28	*	21	17	46	21
MILITARY/COMM. CORPS	*	*	*	*	*	*	*	*	*	*	*	*	*
STATE GOVT.	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER GOVT.	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*
COMPUTER/INFORMATION SPECIALISTS													
TOTAL EMPLOYED	12,164	5,400	615	893	3,892	2,052	1,114	938	2,361	678	375	1,181	117
BUSINESS/INDUSTRY	6,919	3,738	107	511	3,120	1,187	829	358	130	633	345	829	57
EDUCATIONAL INSTITUTION	4,031	1,038	488	211	339	480	61	419	2,204	33	71	151	54
4-YR. COLL./UNIV.	3,905	1,010	488	211	311	476	61	415	2,117	33	71	150	48
2-YR. COLLEGES	96	*	*	*	*	2	*	2	87	*	*	1	6
ELEM/SEC. SCHOOLS	30	28	*	*	28	2	*	2	*	*	*	*	*
HOSPITALS/CLINICS	70	26	3	23	*	44	27	17	*	*	*	*	*
NONPROFIT ORGS.	345	139	6	18	115	87	35	52	*	1	11	103	4
FEDERAL GOVT.	490	208	11	59	138	134	112	22	27	11	48	60	2
MILITARY/COMM. CORPS	27	21	*	3	18	6	2	4	*	*	*	*	*
STATE GOVT.	229	132	*	15	117	84	23	61	*	*	*	13	*
OTHER GOVT.	107	84	*	39	45	*	*	*	*	*	*	23	*
OTHER	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	46	14	*	14	*	30	25	5	*	*	*	2	*
ENVIRONMENTAL SCIENTISTS													
TOTAL EMPLOYED	16,467	6,728	3,287	3,112	329	3,129	1,825	1,304	3,435	1,198	242	1,445	290
BUSINESS/INDUSTRY	5,154	2,077	371	1,453	253	997	544	453	33	1,138	177	652	80
EDUCATIONAL INSTITUTION	6,682	2,319	1,755	564	*	685	253	432	3,364	13	17	150	134
4-YR. COLL./UNIV.	6,519	2,319	1,755	564	*	636	253	383	3,250	13	17	150	134
2-YR. COLLEGES	144	*	*	*	*	41	*	41	103	*	*	*	*
ELEM/SEC. SCHOOLS	19	*	*	*	*	8	*	8	11	*	*	*	*
HOSPITALS/CLINICS	*	*	*	*	*	*	*	*	*	*	*	*	*
NONPROFIT ORGS.	555	285	229	56	*	202	147	55	25	15	2	19	7
FEDERAL GOVT.	3,102	1,698	839	815	44	1,026	799	227	8	1	34	323	12
MILITARY/COMM. CORPS	108	32	*	5	27	29	18	11	*	*	7	40	*
STATE GOVT.	633	265	85	175	5	161	64	97	5	5	5	175	17
OTHER GOVT.	186	45	8	37	*	29	*	29	*	26	*	86	*
OTHER	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	47	7	*	7	*	*	*	*	*	*	*	*	40
EARTH SCIENTISTS													
TOTAL EMPLOYED	12,523	4,355	1,852	2,257	246	2,480	1,270	1,210	2,918	1,073	199	1,269	229
BUSINESS/INDUSTRY	4,596	1,799	315	1,266	218	925	480	445	29	1,020	148	600	75
EDUCATIONAL INSTITUTION	4,658	1,050	783	267	*	534	160	374	2,864	6	5	102	97
4-YR. COLL./UNIV.	4,497	1,050	783	267	*	485	160	325	2,752	6	5	102	97
2-YR. COLLEGES	142	*	*	*	*	41	*	41	101	*	*	*	*
ELEM/SEC. SCHOOLS	19	*	*	*	*	8	*	8	11	*	*	*	*
HOSPITALS/CLINICS	*	*	*	*	*	*	*	*	*	*	*	*	*
NONPROFIT ORGS.	271	53	49	4	*	163	116	47	17	15	*	16	7
FEDERAL GOVT.	2,176	1,203	622	553	28	659	452	207	8	1	34	270	1
MILITARY/COMM. CORPS	46	5	*	5	*	11	*	11	*	*	7	23	*
STATE GOVT.	552	193	75	118	*	159	62	97	*	5	5	173	17
OTHER GOVT.	185	45	8	37	*	29	*	29	*	26	*	85	*
OTHER	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	39	7	*	7	*	*	*	*	*	*	*	*	32
OCEANOGRAPHERS													
TOTAL EMPLOYED	1,742	1,030	771	243	16	311	257	54	188	46	43	72	52
BUSINESS/INDUSTRY	217	97	15	68	14	39	39	*	*	46	29	1	5
EDUCATIONAL INSTITUTION	1,082	681	591	90	*	121	77	44	183	*	12	48	37
4-YR. COLL./UNIV.	1,080	681	591	90	*	121	77	44	181	*	12	48	37
2-YR. COLLEGES	2	*	*	*	*	*	*	*	2	*	*	*	*
ELEM/SEC. SCHOOLS	*	*	*	*	*	*	*	*	*	*	*	*	*
HOSPITALS/CLINICS	*	*	*	*	*	*	*	*	*	*	*	*	*
NONPROFIT ORGS.	95	71	57	14	*	19	11	8	*	*	2	3	*
FEDERAL GOVT.	274	131	98	31	2	124	122	2	*	*	*	17	2
MILITARY/COMM. CORPS	8	*	*	*	*	8	8	*	*	*	*	*	*
STATE GOVT.	57	50	10	40	*	*	*	*	5	*	*	2	*
OTHER GOVT.	1	*	*	*	*	*	*	*	*	*	*	1	*
OTHER	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	8	*	*	*	*	*	*	*	*	*	*	*	8

* NO CASES REPORTED

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TABLE B-9. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, TYPE OF EMPLOYER, AND PRIMARY WORK ACTIVITY: 1983
CONTINUED

FIELD AND TYPE OF EMPLOYER	TOTAL EMPL	RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN			TEACH-ING	CON-SULT-ING	SALES/ PROF. SER-VICES	OTHER	NO REPORT
		TOTAL	BASIC RE-SEARCH	APPL'D RE-SEARCH	DEVEL-OPMENT	TOTAL	OF R&D	OF OTHER					
ATMOSPHERIC SCIENTISTS													
TOTAL EMPLOYED..........	2,282	1,343	664	612	67	338	298	40	329	79	*	104	9
BUSINESS/INDUSTRY......	341	181	41	119	21	33	25	8	4	72	*	51	*
EDUCATIONAL INSTITUTION	942	508	381	207	*	30	16	14	317	7	*	*	*
4-YR. COLL./UNIV.....	942	508	381	207	*	30	16	14	317	7	*	*	*
2-YR. COLLEGES.......	*	*	*	*	*	*	*	*	*	*	*	*	*
ELEM/SEC. SCHOOLS....	*	*	*	*	*	*	*	*	*	*	*	*	*
HOSPITALS/CLINICS......	*	*	*	*	*	*	*	*	*	*	*	*	*
NONPROFIT ORGS.........	189	161	123	38	*	20	20	*	8	*	*	*	*
FEDERAL GOVT............	652	364	119	231	14	243	225	18	*	*	*	36	9
MILITARY/COMM. CORPS...	54	27	*	*	27	10	10	*	*	*	*	17	*
STATE GOVT..............	24	22	*	17	5	2	2	*	*	*	*	*	*
OTHER GOVT..............	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER..................	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT..............	*	*	*	*	*	*	*	*	*	*	*	*	*
LIFE SCIENTISTS													
TOTAL EMPLOYED..........	92,802	41,023	28,704	10,707	1,532	12,971	6,165	6,806	22,452	1,981	6,223	5,566	2,586
BUSINESS/INDUSTRY......	16,444	5,614	1,652	2,981	981	3,919	3,280	639	109	1,335	2,756	2,290	421
EDUCATIONAL INSTITUTION	58,906	26,549	21,095	5,223	231	5,250	756	4,494	22,103	317	1,636	1,520	1,531
4-YR. COLL./UNIV.....	57,315	26,526	21,078	5,223	225	5,075	756	4,319	20,805	311	1,617	1,505	1,476
2-YR. COLLEGES.......	1,287	17	17	*	*	127	*	127	1,091	2	2	*	48
ELEM/SEC. SCHOOLS....	304	6	*	*	6	48	*	48	207	4	17	15	7
HOSPITALS/CLINICS......	3,606	1,094	727	269	98	554	104	450	29	57	1,167	439	266
NONPROFIT ORGS.........	3,258	2,133	1,698	354	81	570	283	287	36	53	124	291	51
FEDERAL GOVT............	7,771	4,958	3,225	1,616	117	1,680	1,357	323	41	129	220	654	89
MILITARY/COMM. CORPS...	728	143	65	65	13	243	163	80	65	4	224	49	*
STATE GOVT..............	1,304	470	301	161	8	448	186	262	15	57	54	238	22
OTHER GOVT..............	406	32	21	8	3	216	36	180	*	29	41	73	15
OTHER..................	158	*	*	*	*	84	*	84	54	*	1	12	7
NO REPORT..............	221	30	*	30	*	7	*	7	*	*	*	*	184
BIOLOGICAL SCIENTISTS													
TOTAL EMPLOYED..........	55,205	28,080	23,129	4,312	639	5,375	2,835	3,040	15,156	886	1,139	2,504	1,565
BUSINESS/INDUSTRY......	7,730	3,301	1,282	1,604	415	1,893	1,519	374	40	544	677	1,098	177
EDUCATIONAL INSTITUTION	38,046	18,513	16,978	1,478	57	2,340	260	2,080	15,012	160	229	655	1,137
4-YR. COLL./UNIV.....	36,780	18,490	16,961	1,478	51	2,263	260	2,003	13,865	158	229	649	1,126
2-YR. COLLEGES.......	1,025	17	17	*	*	35	*	35	967	2	*	*	4
ELEM/SEC. SCHOOLS....	241	6	*	*	6	42	*	42	180	*	*	6	7
HOSPITALS/CLINICS......	1,296	852	603	216	33	150	41	109	6	41	104	105	38
NONPROFIT ORGS.........	2,344	1,732	1,486	187	59	311	211	100	12	15	51	172	51
FEDERAL GOVT............	4,622	3,240	2,490	682	68	829	664	165	25	84	48	325	71
MILITARY/COMM. CORPS...	214	99	52	40	7	81	67	14	7	*	7	20	*
STATE GOVT..............	591	301	218	83	*	153	73	80	*	42	9	81	5
OTHER GOVT..............	170	25	20	5	*	74	*	74	*	*	14	48	9
OTHER..................	91	*	*	*	*	37	*	37	54	*	*	*	*
NO REPORT..............	101	17	*	17	*	7	*	7	*	*	*	*	77
AGRICULTURAL SCIENTISTS													
TOTAL EMPLOYED..........	14,536	6,213	1,653	4,200	360	2,833	1,609	1,224	2,489	465	617	1,498	421
BUSINESS/INDUSTRY......	3,583	1,019	145	615	259	954	785	169	*	366	409	660	175
EDUCATIONAL INSTITUTION	8,189	3,650	921	2,671	58	1,202	339	863	2,450	51	153	523	160
4-YR. COLL./UNIV.....	8,036	3,650	921	2,671	58	1,163	339	824	2,336	51	153	523	160
2-YR. COLLEGES.......	132	*	*	*	*	39	*	39	93	*	*	*	*
ELEM/SEC. SCHOOLS....	21	*	*	*	*	*	*	*	21	*	*	*	*
HOSPITALS/CLINICS......	5	3	*	*	3	2	*	2	*	*	*	*	*
NONPROFIT ORGS.........	305	132	32	88	12	61	39	22	21	36	21	34	*
FEDERAL GOVT............	2,036	1,361	554	779	28	415	327	88	9	12	23	213	3
MILITARY/COMM. CORPS...	*	*	*	*	*	*	*	*	*	*	*	*	*
STATE GOVT..............	259	42	1	41	*	124	83	41	9	*	11	56	17
OTHER GOVT..............	36	*	*	*	*	36	36	*	*	*	*	*	*
OTHER..................	58	*	*	*	*	39	*	39	*	*	*	12	7
NO REPORT..............	65	6	*	6	*	*	*	*	*	*	*	*	59
MEDICAL SCIENTISTS													
TOTAL EMPLOYED..........	23,061	6,730	4,002	2,195	533	4,263	1,721	2,542	4,807	630	4,467	1,564	600
BUSINESS/INDUSTRY......	5,131	1,294	225	762	307	1,072	976	96	69	425	1,670	532	69
EDUCATIONAL INSTITUTION	12,671	4,306	3,196	1,074	116	1,708	157	1,551	4,641	106	1,254	342	234
4-YR. COLL./UNIV.....	12,499	4,306	3,196	1,074	116	1,649	157	1,492	4,604	102	1,235	333	190
2-YR. COLLEGES.......	130	*	*	*	*	53	*	53	31	*	2	*	44
ELEM/SEC. SCHOOLS....	42	*	*	*	*	6	*	6	6	4	17	9	*
HOSPITALS/CLINICS......	2,305	239	124	53	62	402	63	339	23	16	1,063	334	228
NONPROFIT ORGS.........	609	269	180	79	10	196	33	165	3	2	52	85	*
FEDERAL GOVT............	1,113	357	181	155	21	436	366	70	7	33	149	116	15
MILITARY/COMM. CORPS...	514	44	13	25	6	162	96	66	58	4	217	29	*
STATE GOVT..............	454	127	82	37	8	171	30	141	6	15	34	101	*
OTHER GOVT..............	300	7	1	3	3	106	*	106	*	29	27	25	6
OTHER..................	9	*	*	*	*	8	*	8	*	*	1	*	*
NO REPORT..............	55	7	*	7	*	*	*	*	*	*	*	*	48
PSYCHOLOGISTS													
TOTAL EMPLOYED..........	46,645	5,017	2,344	2,360	313	5,608	903	4,705	12,708	2,084	18,488	2,081	659
BUSINESS/INDUSTRY......	13,020	965	101	649	215	730	294	436	189	1,543	8,957	493	143
EDUCATIONAL INSTITUTION	22,182	3,135	2,040	1,071	24	2,528	116	2,412	12,203	182	3,213	676	245
4-YR. COLL./UNIV.....	19,377	3,104	2,040	1,040	24	1,963	113	1,850	11,478	121	2,032	445	234
2-YR. COLLEGES.......	951	6	*	6	*	127	*	127	685	4	83	46	*
ELEM/SEC. SCHOOLS....	1,854	25	*	25	*	438	3	435	40	57	1,098	185	11
HOSPITALS/CLINICS......	6,042	189	84	97	8	827	103	724	137	148	4,214	420	107
NONPROFIT ORGS.........	1,773	264	64	200	*	376	34	342	46	52	806	162	67
FEDERAL GOVT............	1,191	313	48	223	42	406	276	130	17	32	263	160	*
MILITARY/COMM. CORPS...	188	*	*	*	*	32	6	26	*	*	132	24	*
STATE GOVT..............	1,250	100	7	69	24	458	72	386	9	90	511	80	2
OTHER GOVT..............	898	51	*	51	*	251	2	249	74	37	392	66	27
OTHER..................	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT..............	101	*	*	*	*	*	*	*	33	*	*	*	68

* NO CASES REPORTED

TABLE B-9. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, TYPE OF EMPLOYER, AND PRIMARY WORK ACTIVITY: 1983
CONTINUED

		RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN							
FIELD AND TYPE OF EMPLOYER	TOTAL EMPL	TOTAL	BASIC RE-SEARCH	APPL'D RE-SEARCH	DEVEL-OPMENT	TOTAL	OF R&D	OF OTHER	TEACH-ING	CON-SULT-ING	SALES/ PROF. SER-VICES	OTHER	NO REPORT
SOCIAL SCIENTISTS													
TOTAL.EMPLOYED..........	59,332	9,418	3,192	5,752	474	9,220	1,550	7,670	31,094	1,534	1,338	5,307	1,421
BUSINESS/INDUSTRY......	6,751	1,522	44	1,314	164	1,045	233	812	159	1,217	908	1,686	214
EDUCATIONAL INSTITUTION	42,754	5,078	2,750	2,235	93	4,908	219	4,689	30,638	58	98	1,078	896
4-YR. COLL./UNIV.....	40,966	4,974	2,680	2,201	93	4,632	219	4,413	29,325	58	91	1,039	847
2-YR. COLLEGES........	1,420	64	53	11	*	172	*	172	1,132	*	3	*	49
ELEM/SEC. SCHOOLS....	368	40	17	23	*	104	*	104	181	*	4	39	*
HOSPITALS/CLINICS......	151	72	*	61	11	47	*	47	3	2	22	*	5
NONPROFIT ORGS.........	2,080	700	171	419	110	780	310	470	132	[illegible]	34	303	7
FEDERAL GOVT...........	4,299	1,398	154	1,217	27	1,314	620	694	77	131	135	1,058	186
MILITARY/COMM. CORPS...	377	9	5	*	4	114	*	114	*	10	27	217	*
STATE GOVT.............	1,453	336	62	227	47	597	44	553	65	34	95	300	26
OTHER GOVT.............	601	117	3	96	18	258	17	241	2	21	19	181	3
OTHER..................	778	186	3	183	*	157	107	50	14	17	*	404	*
NO REPORT..............	88	*	*	*	*	*	*	*	4	*	*	*	84
ECONOMISTS													
TOTAL.EMPLOYED..........	16,958	3,911	824	2,947	140	2,443	488	1,955	7,803	781	387	1,393	240
BUSINESS/INDUSTRY......	2,779	952	5	874	73	457	82	375	50	685	244	374	17
EDUCATIONAL INSTITUTION	11,362	1,996	769	1,210	17	1,289	94	1,195	7,726	*	25	185	141
4-YR. COLL./UNIV.....	11,264	1,996	769	1,210	17	1,262	94	1,168	7,655	*	25	185	141
2-YR. COLLEGES........	98	*	*	*	*	27	*	27	71	*	*	*	*
ELEM/SEC. SCHOOLS....	*	*	*	*	*	*	*	*	*	*	*	*	*
HOSPITALS/CLINICS......	15	*	*	*	*	*	*	*	*	*	15	*	*
NONPROFIT ORGS.........	219	61	2	30	29	108	87	21	*	7	*	43	*
FEDERAL GOVT...........	1,692	734	43	670	21	363	164	199	13	45	91	400	46
MILITARY/COMM. CORPS...	5	5	5	*	*	*	*	*	*	*	*	*	*
STATE GOVT.............	141	25	*	25	*	52	*	52	*	27	12	25	*
OTHER GOVT.............	92	19	*	19	*	69	*	69	*	*	*	4	*
OTHER..................	617	119	*	119	*	105	61	44	14	17	*	362	*
NO REPORT..............	36	*	*	*	*	*	*	*	*	*	*	*	36
SOCIOLOGISTS/ANTHRO.													
TOTAL.EMPLOYED..........	12,056	1,823	1,056	760	7	1,228	67	1,161	7,565	142	243	730	326
BUSINESS/INDUSTRY......	801	85	*	81	4	134	*	134	27	136	151	187	81
EDUCATIONAL INSTITUTION	[illegible]	1,463	966	494	3	893	6	887	7,508	*	32	267	206
4-YR. COLL./UNIV.....	[illegible]	1,392	918	471	3	852	6	846	7,119	*	32	267	179
2-YR. COLLEGES........	443	48	48	*	*	8	*	8	360	*	*	*	27
ELEM/SEC. SCHOOLS....	85	23	*	23	*	33	*	33	29	*	*	*	*
HOSPITALS/CLINICS......	37	*	*	*	*	25	*	25	*	*	7	*	5
NONPROFIT ORGS.........	431	145	54	95	*	91	10	81	30	*	22	139	*
FEDERAL GOVT...........	121	5	5	*	*	56	26	30	*	5	*	55	*
MILITARY/COMM. CORPS...	27	*	*	*	*	*	*	*	*	*	27	*	*
STATE GOVT.............	163	85	28	57	*	4	*	4	*	*	*	48	26
OTHER GOVT.............	46	*	*	*	*	8	8	*	*	*	4	34	*
OTHER..................	53	36	3	33	*	17	17	*	*	*	*	*	*
NO REPORT..............	8	*	*	*	*	*	*	*	*	*	*	*	8
OTHER SOCIAL SCIENTISTS													
TOTAL.EMPLOYED..........	30,318	3,684	1,312	2,045	327	5,549	995	4,554	15,726	612	708	3,184	855
BUSINESS/INDUSTRY......	3,171	485	39	359	87	454	151	303	82	396	513	1,125	116
EDUCATIONAL INSTITUTION	21,023	1,619	1,015	531	73	2,726	119	2,607	15,404	58	41	626	549
4-YR. COLL./UNIV.....	19,861	1,586	993	520	73	2,518	119	2,399	14,551	58	34	587	527
2-YR. COLLEGES........	879	16	5	11	*	137	*	137	701	*	3	*	22
ELEM/SEC. SCHOOLS....	283	17	17	*	*	71	*	71	152	*	4	39	*
HOSPITALS/CLINICS......	99	72	*	61	11	22	*	22	3	2	*	*	*
NONPROFIT ORGS.........	1,430	490	115	294	81	581	213	368	102	37	12	201	7
FEDERAL GOVT...........	2,486	659	106	547	6	895	430	465	64	81	44	603	140
MILITARY/COMM. CORPS...	345	4	*	*	4	114	*	114	*	10	*	217	*
STATE GOVT.............	1,149	226	34	145	47	541	44	497	65	7	83	227	*
OTHER GOVT.............	463	98	3	77	18	181	9	172	2	21	15	143	3
OTHER..................	108	31	*	31	*	35	29	6	*	*	*	42	*
NO REPORT..............	44	*	*	*	*	*	*	*	4	*	*	*	40
ENGINEERS													
TOTAL.EMPLOYED..........	61,545	24,746	3,099	11,884	9,763	15,492	10,537	4,955	11,833	3,747	1,252	3,728	747
BUSINESS/INDUSTRY......	34,500	16,304	452	7,651	8,201	9,848	7,863	1,985	415	3,527	1,056	3,008	302
EDUCATIONAL INSTITUTION	20,320	5,218	2,233	2,446	539	3,227	672	2,555	11,290	66	39	139	341
4-YR. COLL./UNIV.....	20,249	5,218	2,233	2,446	539	3,227	672	2,555	11,219	66	39	139	341
2-YR. COLLEGES........	71	*	*	*	*	*	*	*	71	*	*	*	*
ELEM/SEC. SCHOOLS....	*	*	*	*	*	*	*	*	*	*	*	*	*
HOSPITALS/CLINICS......	7	*	*	*	*	7	7	*	*	*	*	*	*
NONPROFIT ORGS.........	1,921	1,063	74	579	410	539	469	70	65	115	70	58	11
FEDERAL GOVT...........	3,843	1,951	340	1,101	510	1,411	1,279	132	61	34	47	304	35
MILITARY/COMM. CORPS...	424	74	*	29	45	251	234	17	*	*	*	99	*
STATE GOVT.............	94	30	*	30	*	56	3	53	*	*	*	8	*
OTHER GOVT.............	289	58	*	*	58	120	10	110	*	*	*	111	*
OTHER..................	41	2	*	2	*	33	*	33	*	5	*	1	*
NO REPORT..............	106	46	*	46	*	*	*	*	2	*	*	*	58
AERO/ASTRO ENGINEERS													
TOTAL.EMPLOYED..........	3,604	1,800	273	721	806	954	798	156	517	138	79	196	*
BUSINESS/INDUSTRY......	1,928	1,017	44	397	576	590	434	156	38	130	79	74	*
EDUCATIONAL INSTITUTION	865	341	163	137	41	37	37	*	479	8	*	*	*
4-YR. COLL./UNIV.....	865	341	163	137	41	37	37	*	479	8	*	*	*
2-YR. COLLEGES........	*	*	*	*	*	*	*	*	*	*	*	*	*
ELEM/SEC. SCHOOLS....	*	*	*	*	*	*	*	*	*	*	*	*	*
HOSPITALS/CLINICS......	*	*	*	*	*	*	*	*	*	*	*	*	*
NONPROFIT ORGS.........	305	248	*	110	138	57	57	*	*	*	*	*	*
FEDERAL GOVT...........	511	194	66	77	51	204	204	*	*	*	*	113	*
MILITARY/COMM. CORPS...	74	*	*	*	*	66	66	*	*	*	*	8	*
STATE GOVT.............	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER GOVT.............	1	*	*	*	*	*	*	*	*	*	*	1	*
OTHER..................	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT..............	*	*	*	*	*	*	*	*	*	*	*	*	*

* NO CASES REPORTED

TABLE B-9. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, TYPE OF EMPLOYER, AND PRIMARY WORK ACTIVITY: 1983
CONTINUED

FIELD AND TYPE OF EMPLOYER	TOTAL EMPL	RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN							
		TOTAL	BASIC RE-SEARCH	APPL'D RE-SEARCH	DEVEL-OPMENT	TOTAL	OF R&D	OF OTHER	TEACH-ING	CON-SULT-ING	SALES, PROF. SER-VICES	OTHER	NO REPORT
CHEMICAL ENGINEERS													
TOTAL EMPLOYED..........	6,992	2,968	374	1,600	914	1,697	1,110	587	1,078	227	185	775	62
BUSINESS/INDUSTRY......	4,788	2,381	32	1,437	912	1,323	947	376	23	176	185	696	4
EDUCATIONAL INSTITUTION	1,722	388	270	118	*	246	35	211	1,055	*	*	33	*
4-YR. COLL./UNIV.....	1,722	388	270	118	*	246	35	211	1,055	*	*	33	*
2-YR. COLLEGES.......	*	*	*	*	*	*	*	*	*	*	*	*	*
ELEM/SEC. SCHOOLS....	*	*	*	*	*	*	*	*	*	*	*	*	*
HOSPITALS/CLINICS......	*	*	*	*	*	*	*	*	*	*	*	*	*
NONPROFIT ORGS.........	202	105	27	78	*	62	62	*	*	35	*	*	*
FEDERAL GOVT...........	174	92	45	47	*	66	66	*	*	16	*	*	*
MILITARY/COMM. CORPS...	48	2	*	*	2	*	*	*	*	*	*	46	*
STATE GOVT.............	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER GOVT.............	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER..................	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT..............	58	*	*	*	*	*	*	*	*	*	*	*	58
CIVIL ENGINEERS													
TOTAL EMPLOYED..........	5,317	898	189	391	318	778	180	598	2,132	934	113	360	102
BUSINESS/INDUSTRY......	1,895	367	*	49	318	269	118	151	*	896	113	230	20
EDUCATIONAL INSTITUTION	3,138	492	189	303	*	410	34	376	2,132	22	*	*	82
4-YR. COLL./UNIV.....	3,121	492	189	303	*	410	34	376	2,115	22	*	*	82
2-YR. COLLEGES.......	17	*	*	*	*	*	*	*	17	*	*	*	*
ELEM/SEC. SCHOOLS....	*	*	*	*	*	*	*	*	*	*	*	*	*
HOSPITALS/CLINICS......	*	*	*	*	*	*	*	*	*	*	*	*	*
NONPROFIT ORGS.........	16	*	*	*	*	6	6	*	*	*	*	10	*
FEDERAL GOVT...........	79	24	*	24	*	32	12	20	*	16	*	7	*
MILITARY/COMM. CORPS...	42	15	*	15	*	5	*	5	*	*	*	22	*
STATE GOVT.............	17	*	*	*	*	9	*	9	*	*	*	8	*
OTHER GOVT.............	129	*	*	*	*	47	10	37	*	*	*	82	*
OTHER..................	1	*	*	*	*	*	*	*	*	*	*	1	*
NO REPORT..............	*	*	*	*	*	*	*	*	*	*	*	*	*
ELEC./ELECTRON. ENGINEERS													
TOTAL EMPLOYED..........	12,696	5,006	330	2,125	2,551	3,961	2,817	1,144	2,447	380	247	408	247
BUSINESS/INDUSTRY......	7,615	3,569	73	1,437	2,059	2,769	2,343	426	154	355	247	393	128
EDUCATIONAL INSTITUTION	3,960	749	257	269	223	796	144	652	2,293	22	*	*	100
4-YR. COLL./UNIV.....	3,959	749	257	269	223	796	144	652	2,292	22	*	*	100
2-YR. COLLEGES.......	1	*	*	*	*	*	*	*	1	*	*	*	*
ELEM/SEC. SCHOOLS....	*	*	*	*	*	*	*	*	*	*	*	*	*
HOSPITALS/CLINICS......	*	*	*	*	*	*	*	*	*	*	*	*	*
NONPROFIT ORGS.........	218	171	*	116	55	44	22	22	*	3	*	*	*
FEDERAL GOVT...........	776	474	*	303	171	283	283	*	*	*	*	*	19
MILITARY/COMM. CORPS...	65	43	*	*	43	22	22	*	*	*	*	*	*
STATE GOVT.............	47	*	*	*	*	47	3	44	*	*	*	*	*
OTHER GOVT.............	15	*	*	*	*	*	*	*	*	*	*	15	*
OTHER..................	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT..............	*	*	*	*	*	*	*	*	*	*	*	*	*
MATERIALS SCI. ENGINEERS													
TOTAL EMPLOYED..........	7,422	3,591	936	2,007	648	2,306	1,947	361	799	141	122	438	23
BUSINESS/INDUSTRY......	4,893	2,351	190	1,609	552	1,849	1,685	164	46	141	108	398	*
EDUCATIONAL INSTITUTION	1,820	811	567	198	46	232	46	186	738	*	*	16	23
4-YR. COLL./UNIV.....	1,820	811	567	198	46	232	46	186	738	*	*	16	23
2-YR. COLLEGES.......	*	*	*	*	*	*	*	*	*	*	*	*	*
ELEM/SEC. SCHOOLS....	*	*	*	*	*	*	*	*	*	*	*	*	*
HOSPITALS/CLINICS......	*	*	*	*	*	*	*	*	*	*	*	*	*
NONPROFIT ORGS.........	237	97	47	*	50	126	126	*	*	*	14	*	*
FEDERAL GOVT...........	472	332	132	200	*	101	90	11	15	*	*	24	*
MILITARY/COMM. CORPS...	*	*	*	*	*	*	*	*	*	*	*	*	*
STATE GOVT.............	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER GOVT.............	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER..................	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT..............	*	*	*	*	*	*	*	*	*	*	*	*	*
MECHANICAL ENGINEERS													
TOTAL EMPLOYED..........	5,657	1,891	156	680	1,055	1,088	597	491	1,867	342	65	377	27
BUSINESS/INDUSTRY......	2,596	1,427	22	478	927	485	310	175	*	328	65	264	27
EDUCATIONAL INSTITUTION	2,578	323	134	127	62	302	19	283	1,867	14	*	72	*
4-YR. COLL./UNIV.....	2,560	323	134	127	62	302	19	283	1,849	14	*	72	*
2-YR. COLLEGES.......	18	*	*	*	*	*	*	*	18	*	*	*	*
ELEM/SEC. SCHOOLS....	*	*	*	*	*	*	*	*	*	*	*	*	*
HOSPITALS/CLINICS......	*	*	*	*	*	*	*	*	*	*	*	*	*
NONPROFIT ORGS.........	107	2	*	2	*	105	72	33	*	*	*	*	*
FEDERAL GOVT...........	353	139	*	73	66	196	196	*	*	*	*	18	*
MILITARY/COMM. CORPS...	23	*	*	*	*	*	*	*	*	*	*	23	*
STATE GOVT.............	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER GOVT.............	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER..................	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT..............	*	*	*	*	*	*	*	*	*	*	*	*	*
NUCLEAR ENGINEERS													
TOTAL EMPLOYED..........	2,329	1,146	22	588	536	547	296	251	275	225	38	55	43
BUSINESS/INDUSTRY......	1,380	625	*	229	396	413	212	201	22	225	36	16	43
EDUCATIONAL INSTITUTION	674	339	22	248	69	114	64	50	221	*	*	*	*
4-YR. COLL./UNIV.....	674	339	22	248	69	114	64	50	221	*	*	*	*
2-YR. COLLEGES.......	*	*	*	*	*	*	*	*	*	*	*	*	*
ELEM/SEC. SCHOOLS....	*	*	*	*	*	*	*	*	*	*	*	*	*
HOSPITALS/CLINICS......	*	*	*	*	*	*	*	*	*	*	*	*	*
NONPROFIT ORGS.........	67	22	*	22	*	13	13	*	32	*	*	*	*
FEDERAL GOVT...........	148	100	*	87	13	7	7	*	*	*	2	39	*
MILITARY/COMM. CORPS...	*	*	*	*	*	*	*	*	*	*	*	*	*
STATE GOVT.............	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER GOVT.............	58	58	*	*	58	*	*	*	*	*	*	*	*
OTHER..................	2	2	*	2	*	*	*	*	*	*	*	*	*
NO REPORT..............	*	*	*	*	*	*	*	*	*	*	*	*	*

* NO CASES REPORTED

TABLE B-9. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, TYPE OF EMPLOYER, AND PRIMARY WORK ACTIVITY: 1983
CONTINUED

FIELD AND TYPE OF EMPLOYER	TOTAL EMPL	RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN			TEACHING	CONSULTING	SALES/ PROF. SERVICES	OTHER	NO REPORT
		TOTAL	BASIC RESEARCH	APPL'D RESEARCH	DEVELOPMENT	TOTAL	OF R&D	OF OTHER					
SYSTEMS DESIGN ENGINEERS													
TOTAL EMPLOYED..........	3,891	1,825	38	421	1,366	830	699	131	585	288	79	268	16
BUSINESS/INDUSTRY......	2,252	1,287	22	152	1,113	430	405	25	81	224	23	205	2
EDUCATIONAL INSTITUTION	881	181	16	89	76	193	87	106	504	*	*	*	3
4-YR. COLL./UNIV.....	881	181	16	89	76	193	87	106	504	*	*	*	3
2-YR. COLLEGES.......	*	*	*	*	*	*	*	*	*	*	*	*	*
ELEM/SEC. SCHOOLS....	*	*	*	*	*	*	*	*	*	*	*	*	*
HOSPITALS/CLINICS......	*	*	*	*	*	*	*	*	*	*	*	*	*
NONPROFIT ORGS.........	396	262	*	122	80	17	17	*	*	62	56	48	11
FEDERAL GOVT...........	252	133	*	36	97	102	102	*	*	2	*	15	*
MILITARY/COMM. CORPS...	88	*	*	*	*	88	88	*	*	*	*	*	*
STATE GOVT.............	22	22	*	22	*	*	*	*	*	*	*	*	*
OTHER GOVT.............	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER..................	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT..............	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER ENGINEERS													
TOTAL EMPLOYED..........	13,557	5,621	781	3,271	1,569	3,329	2,093	1,236	2,133	1,072	324	851	227
BUSINESS/INDUSTRY......	7,153	3,280	69	1,863	1,348	1,720	1,409	311	51	1,052	240	732	78
EDUCATIONAL INSTITUTION	4,682	1,594	615	957	22	897	206	691	2,001	*	39	18	133
4-YR. COLL./UNIV.....	4,647	1,594	615	957	22	897	206	691	1,966	*	39	18	133
2-YR. COLLEGES.......	35	*	*	*	*	*	*	*	35	*	*	*	*
ELEM/SEC. SCHOOLS....	*	*	*	*	*	*	*	*	*	*	*	*	*
HOSPITALS/CLINICS......	7	*	*	*	*	7	7	*	*	*	*	*	*
NONPROFIT ORGS.........	373	216	*	129	87	109	94	15	33	15	*	*	*
FEDERAL GOVT...........	1,070	463	97	254	112	420	319	101	46	*	45	88	16
MILITARY/COMM. CORPS...	84	14	*	14	*	70	58	12	*	*	*	*	*
STATE GOVT.............	8	8	*	8	*	*	*	*	*	*	*	*	*
OTHER GOVT.............	86	*	*	*	*	73	*	73	*	*	*	13	*
OTHER..................	38	*	*	*	*	33	*	33	*	5	*	*	*
NO REPORT..............	48	46	*	46	*	*	*	*	2	*	*	*	*

* NO CASES REPORTED

SOURCE: NATIONAL SCIENCE FOUNDATION

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TABLE B-10. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, YEARS OF PROFESSIONAL EXPERIENCE, AND TYPE OF EMPLOYER: 1983

FIELD AND YEARS OF PROFESSIONAL EXPERIENCE	TOTAL EMPL	BUSINESS/ INDUSTRY	EDUCATIONAL INSTITUTIONS				HOSPITAL/ CLINIC	NON-PROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NO REPORT
			TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL								
ALL FIELDS														
TOTAL	369,320	113,463	196,050	187,554	5,421	3,075	10,435	11,894	25,792	2,090	5,142	2,575	1,002	876
1 OR LESS YEARS	4,728	1,306	2,622	2,564	56	2	218	272	227	22	*	27	*	34
2-4 YEARS	31,451	9,921	16,181	15,504	301	296	1,523	1,574	1,444	176	268	236	72	56
5-9 YEARS	60,824	20,561	30,191	29,013	592	586	2,272	2,353	3,480	259	1,106	471	45	86
10-14 YEARS	64,420	21,005	32,637	30,954	1,209	474	1,877	1,094	4,621	380	1,246	451	229	80
15-19 YEARS	50,189	15,238	27,213	25,797	925	[illegible]	889	1,260	4,014	391	574	258	251	101
20-24 YEARS	36,620	10,317	20,745	20,027	[illegible]	181	618	871	3,080	333	339	157	63	97
25-29 YEARS	26,947	7,113	15,646	14,833	[illegible]	194	[illegible]	547	2,219	201	284	305	144	51
30-34 YEARS	21,510	6,581	11,603	11,277	162	164	381	[illegible]	1,670	96	218	110	108	96
35-39 YEARS	8,996	2,395	5,288	5,100	80	108	116	301	[illegible]	*	68	92	17	12
40 OR MORE YEARS	6,439	2,029	3,392	3,283	104	5	45	380	474	*	20	31	*	68
NO REPORT	57,196	16,997	30,532	29,122	836	574	2,059	1,795	3,857	232	1,019	437	73	195
SCIENTISTS														
TOTAL	307,775	78,963	175,730	167,305	5,350	3,075	10,428	9,973	21,950	1,666	5,048	2,286	961	770
1 OR LESS YEARS	4,040	928	2,316	2,258	56	2	218	270	227	20	*	27	*	34
2-4 YEARS	27,128	7,117	14,995	14,401	298	296	1,523	1,352	1,344	174	265	232	70	56
5-9 YEARS	52,824	15,553	27,823	26,678	559	586	2,272	2,164	3,131	257	1,081	413	44	86
10-14 YEARS	54,447	14,805	29,853	28,170	1,209	474	1,870	1,645	4,022	287	1,246	417	224	78
15-19 YEARS	40,413	9,511	24,273	22,858	924	491	889	1,044	3,370	242	530	246	251	57
20-24 YEARS	29,208	6,261	18,023	17,312	530	181	618	829	2,518	303	339	157	63	97
25-29 YEARS	22,121	4,787	13,869	13,056	619	194	437	375	1,811	149	284	247	111	51
30-34 YEARS	17,370	4,645	10,030	9,716	150	164	381	359	1,389	81	218	77	108	82
35-39 YEARS	7,369	1,619	4,602	4,414	80	108	116	283	574	*	68	78	17	12
40 OR MORE YEARS	5,127	1,431	2,882	2,708	89	5	45	289	374	*	20	18	*	68
NO REPORT	47,728	12,306	27,064	25,654	836	574	2,059	1,363	3,190	153	997	374	73	149
PHYSICAL SCIENTISTS														
TOTAL	63,986	28,748	27,931	26,453	1,134	344	559	1,751	4,307	205	158	88	25	214
1 OR LESS YEARS	761	307	376	361	15	*	*	50	28	*	*	*	*	*
2-4 YEARS	5,193	2,696	1,893	1,845	41	7	47	206	244	45	3	25	24	10
5-9 YEARS	9,095	4,741	3,252	3,085	139	28	65	339	559	41	48	22	*	28
10-14 YEARS	10,076	4,433	4,423	4,119	264	40	99	297	705	45	51	*	*	23
15-19 YEARS	9,821	2,938	4,675	4,444	186	45	28	244	898	22	9	5	*	2
20-24 YEARS	6,989	2,639	3,465	3,334	113	18	38	180	579	18	35	*	*	35
25-29 YEARS	5,693	2,640	2,561	2,437	110	14	36	11	236	*	*	9	*	*
30-34 YEARS	4,032	2,018	1,658	1,561	32	65	13	37	266	*	*	*	*	40
35-39 YEARS	1,771	670	957	884	4	69	4	103	37	*	*	*	*	*
40 OR MORE YEARS	1,624	547	812	798	14	*	*	85	110	*	*	14	*	40
NO REPORT	9,131	4,119	3,859	3,585	216	50	229	199	637	34	12	13	1	28
CHEMISTS														
TOTAL	41,298	22,525	15,037	13,905	901	231	398	818	2,054	95	121	72	1	177
1 OR LESS YEARS	608	262	268	253	15	*	*	50	28	*	*	*	*	*
2-4 YEARS	3,648	2,271	1,058	1,032	19	7	38	104	125	14	3	25	*	10
5-9 YEARS	6,198	3,863	1,723	1,589	109	25	54	158	290	27	36	22	*	25
10-14 YEARS	5,998	3,190	2,277	2,034	215	28	74	103	288	13	51	*	*	2
15-19 YEARS	6,037	2,962	2,519	2,303	175	41	23	106	411	*	9	5	*	2
20-24 YEARS	4,103	2,057	1,623	1,529	76	18	37	121	207	10	13	*	*	35
25-29 YEARS	3,856	2,180	1,460	1,372	74	14	14	8	185	*	*	9	*	*
30-34 YEARS	2,780	1,717	824	762	19	43	13	14	172	*	*	*	*	40
35-39 YEARS	1,154	555	540	536	4	*	4	48	7	*	*	*	*	*
40 OR MORE YEARS	1,113	398	558	558	*	*	*	46	76	*	*	*	*	35
NO REPORT	5,803	3,070	2,187	1,937	195	55	141	60	265	31	9	11	1	28
PHYSICISTS/ASTRONOMERS														
TOTAL	22,688	6,223	12,894	12,548	233	113	161	933	2,253	110	37	16	24	37
1 OR LESS YEARS	153	45	108	108	*	*	*	*	*	*	*	*	*	*
2-4 YEARS	1,545	425	835	813	22	*	9	102	119	31	*	*	24	*
5-9 YEARS	2,897	878	1,529	1,496	30	3	11	181	269	14	12	*	*	3
10-14 YEARS	4,078	1,243	2,146	2,085	49	12	25	194	417	32	*	*	*	21
15-19 YEARS	3,784	976	2,156	2,141	11	4	5	138	487	22	*	*	*	*
20-24 YEARS	2,886	582	1,842	1,805	37	*	1	59	372	8	22	*	*	*
25-29 YEARS	1,637	460	1,101	1,065	36	*	22	3	51	*	*	*	*	*
30-34 YEARS	1,252	301	834	799	13	22	*	23	94	*	*	*	*	*
35-39 YEARS	617	115	417	348	*	69	*	55	30	*	*	*	*	*
40 OR MORE YEARS	511	149	254	240	14	*	*	39	42	*	*	14	*	13
NO REPORT	3,328	1,049	1,672	1,648	21	3	88	139	372	3	3	2	*	*
MATHEMATICAL SCIENTISTS														
TOTAL	16,379	2,027	13,244	12,770	318	156	*	211	790	33	21	*	*	53
1 OR LESS YEARS	137	18	114	112	*	2	*	*	5	*	*	*	*	*
2-4 YEARS	1,120	171	885	864	21	*	*	2	62	*	*	*	*	*
5-9 YEARS	2,275	410	1,721	1,680	21	20	*	33	110	*	1	*	*	*
10-14 YEARS	3,665	324	2,113	2,023	74	16	*	34	194	*	*	*	*	*
15-19 YEARS	2,540	253	2,126	1,958	109	59	*	43	92	2	11	*	*	13
20-24 YEARS	1,834	176	1,538	1,514	13	11	*	17	61	28	*	*	*	14
25-29 YEARS	1,101	49	1,027	1,023	2	2	*	2	12	*	*	*	*	11
30-34 YEARS	849	109	712	710	*	2	*	17	11	*	*	*	*	*
35-39 YEARS	402	44	323	309	12	2	*	*	35	*	*	*	*	*
40 OR MORE YEARS	257	64	191	189	2	*	*	*	2	*	*	*	*	*
NO REPORT	3,199	409	2,494	2,388	64	42	*	63	206	3	9	*	*	15
MATHEMATICIANS														
TOTAL	13,589	1,512	11,365	10,891	318	156	*	106	499	33	21	*	*	53
1 OR LESS YEARS	133	16	112	110	*	2	*	*	5	*	*	*	*	*
2-4 YEARS	916	121	736	715	21	*	*	2	57	*	*	*	*	*
5-9 YEARS	1,732	309	1,335	1,294	21	20	*	8	79	*	1	*	*	*
10-14 YEARS	2,177	255	1,799	1,709	74	16	*	20	103	*	*	*	*	*
15-19 YEARS	2,214	180	1,925	1,757	109	59	*	30	53	2	11	*	*	13
20-24 YEARS	1,398	100	1,232	1,208	13	11	*	2	22	28	*	*	*	14
25-29 YEARS	970	27	918	914	2	2	*	2	12	*	*	*	*	11
30-34 YEARS	747	102	622	620	*	2	*	15	8	*	*	*	*	*
35-39 YEARS	360	25	308	294	12	2	*	*	27	*	*	*	*	*
40 OR MORE YEARS	190	50	140	138	2	*	*	*	*	*	*	*	*	*
NO REPORT	2,752	327	2,238	2,132	64	42	*	27	133	3	9	*	*	15

* NO CASES REPORTED

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TABLE B-13. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, YEARS OF PROFESSIONAL
CONTINUED EXPERIENCE, AND TYPE OF EMPLOYER: 1983

FIELD AND YEARS OF PROFESSIONAL EXPERIENCE	TOTAL EMPL	BUSINESS/ INDUSTRY	EDUCATIONAL INSTITUTIONS TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL	HOSPITAL/ CLINIC	NON-PROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NO REPORT
STATISTICIANS														
TOTAL....................	2,790	515	1,879	1,879	*	*	*	105	291	*	*	*	*	*
1 OR LESS YEARS.......	4	2	2	2	*	*	*	*	*	*	*	*	*	*
2-4 YEARS.............	204	50	149	149	*	*	*	*	5	*	*	*	*	*
5-9 YEARS.............	543	101	386	386	*	*	*	25	31	*	*	*	*	*
10-14 YEARS...........	488	69	314	314	*	*	*	14	91	*	*	*	*	*
15-19 YEARS...........	326	73	201	201	*	*	*	13	39	*	*	*	*	*
20-24 YEARS...........	436	76	306	306	*	*	*	15	39	*	*	*	*	*
25-29 YEARS...........	131	22	109	109	*	*	*	*	*	*	*	*	*	*
30-34 YEARS...........	102	7	90	90	*	*	*	2	3	*	*	*	*	*
35-39 YEARS...........	42	19	15	15	*	*	*	*	8	*	*	*	*	*
40 OR MORE YEARS......	67	14	51	51	*	*	*	*	2	*	*	*	*	*
NO REPORT.............	447	82	256	256	*	*	*	36	73	*	*	*	*	*
COMPUTER/INFORMATION SPECIALISTS														
TOTAL....................	12,164	6,815	4,031	3,905	96	30	70	345	490	27	229	107	*	46
1 OR LESS YEARS.......	197	126	37	37	*	*	*	*	34	*	*	*	*	*
2-4 YEARS.............	985	588	368	368	*	*	3	12	14	*	*	*	*	*
5-9 YEARS.............	2,570	1,372	1,006	978	22	6	*	94	11	*	38	39	*	10
10-14 YEARS...........	2,787	1,702	839	798	41	*	28	40	59	17	79	23	*	*
15-19 YEARS...........	1,480	742	524	524	*	*	22	78	66	3	8	23	*	14
20-24 YEARS...........	863	415	270	268	*	2	17	68	88	2	3	*	*	*
25-29 YEARS...........	525	179	170	170	*	*	*	*	107	*	47	22	*	*
30-34 YEARS...........	461	262	178	178	*	*	*	7	14	*	*	*	*	*
35-39 YEARS...........	102	11	83	83	*	*	*	*	8	*	*	*	*	*
40 OR MORE YEARS......	132	56	28	28	*	3	*	34	14	*	*	*	*	*
NO REPORT.............	2,062	1,366	528	473	33	22	*	12	75	5	54	*	*	22
ENVIRONMENTAL SCIENTISTS														
TOTAL....................	16,467	5,154	6,682	6,519	144	19	*	555	3,102	108	633	186	*	47
1 OR LESS YEARS.......	283	81	161	159	2	*	*	14	27	*	*	*	*	*
2-4 YEARS.............	1,423	527	666	664	2	*	*	46	124	12	40	3	*	5
5-9 YEARS.............	2,608	990	949	949	*	*	*	111	425	5	121	7	*	*
10-14 YEARS...........	2,991	992	1,137	1,080	57	*	*	68	500	18	196	72	*	8
15-19 YEARS...........	2,401	733	849	824	17	8	*	138	630	30	15	6	*	*
20-24 YEARS...........	1,508	398	739	731	6	2	*	19	363	36	25	*	*	8
25-29 YEARS...........	1,132	265	533	500	24	9	*	21	234	*	53	26	*	*
30-34 YEARS...........	1,018	308	377	376	1	*	*	28	301	*	2	*	*	2
35-39 YEARS...........	518	168	145	139	6	*	*	30	135	*	40	*	*	*
40 OR MORE YEARS......	398	156	136	136	*	*	*	34	58	*	*	*	*	14
NO REPORT.............	2,107	536	990	961	29	*	*	46	305	7	141	72	*	10
EARTH SCIENTISTS														
TOTAL....................	12,523	4,596	4,658	4,497	142	19	*	271	2,176	46	552	185	*	39
1 OR LESS YEARS.......	204	81	92	90	2	*	*	5	26	*	*	*	*	*
2-4 YEARS.............	999	501	358	358	*	*	*	*	92	*	40	3	*	5
5-9 YEARS.............	1,892	874	552	552	*	*	*	61	286	5	107	7	*	*
10-14 YEARS...........	2,092	797	693	636	57	*	*	46	305	*	171	72	*	8
15-19 YEARS...........	1,752	639	640	615	17	8	*	60	301	11	15	6	*	*
20-24 YEARS...........	1,383	389	628	620	6	2	*	19	299	23	25	*	*	*
25-29 YEARS...........	977	257	411	378	24	9	*	14	216	*	53	26	*	*
30-34 YEARS...........	767	262	320	319	1	*	*	13	170	*	*	*	*	2
35-39 YEARS...........	470	161	126	120	6	*	*	30	113	*	40	*	*	*
40 OR MORE YEARS......	315	148	88	88	*	*	*	14	51	*	*	*	*	14
NO REPORT.............	1,67[illegible]	487	750	721	29	*	*	9	237	7	101	71	*	10
OCEANOGRAPHERS														
TOTAL....................	1,742	2[illegible]7	1,082	1,080	2	*	*	95	274	8	57	1	*	8
1 OR LESS YEARS.......	23	*	17	17	*	*	*	6	*	*	*	*	*	*
2-4 YEARS.............	186	26	155	153	2	*	*	2	3	*	*	*	*	*
5-9 YEARS.............	413	81	232	232	*	*	*	34	62	*	4	*	*	*
10-14 YEARS...........	345	69	197	197	*	*	*	15	51	*	13	*	*	*
15-19 YEARS...........	228	*	136	136	*	*	*	19	73	*	*	*	*	*
20-24 YEARS...........	147	7	100	100	*	*	*	*	24	8	*	*	*	8
25-29 YEARS...........	71	*	64	64	*	*	*	7	*	*	*	*	*	*
30-34 YEARS...........	54	11	18	18	*	*	*	7	18	*	*	*	*	*
35-39 YEARS...........	6	*	6	6	*	*	*	*	*	*	*	*	*	*
40 OR MORE YEARS......	14	*	14	14	*	*	*	*	*	*	*	*	*	*
NO REPORT.............	255	23	143	143	*	*	*	5	43	*	40	1	*	*
ATMOSPHERIC SCIENTISTS														
TOTAL....................	2,202	341	942	942	*	*	*	189	652	54	24	*	*	*
1 OR LESS YEARS.......	56	*	52	52	*	*	*	3	1	*	*	*	*	*
2-4 YEARS.............	238	*	153	153	*	*	*	44	29	12	*	*	*	*
5-9 YEARS.............	303	35	165	165	*	*	*	16	77	*	10	*	*	*
10-14 YEARS...........	554	126	247	247	*	*	*	7	144	18	12	*	*	*
15-19 YEARS...........	421	94	73	73	*	*	*	59	176	19	*	*	*	*
20-24 YEARS...........	58	2	11	11	*	*	*	*	40	5	*	*	*	*
25-29 YEARS...........	84	8	58	58	*	*	*	*	18	*	*	*	*	*
30-34 YEARS...........	197	35	39	39	*	*	*	8	113	*	2	*	*	*
35-39 YEARS...........	42	7	13	13	*	*	*	*	22	*	*	*	*	*
40 OR MORE YEARS......	69	8	34	34	*	*	*	20	7	*	*	*	*	*
NO REPORT.............	180	26	97	97	*	*	*	32	25	*	*	*	*	*
LIFE SCIENTISTS														
TOTAL....................	92,802	16,444	58,906	57,315	1,287	304	3,606	3,258	7,771	728	1,304	406	158	221
1 OR LESS YEARS.......	1,753	190	1,132	1,125	7	*	169	119	96	16	*	24	*	7
2-4 YEARS.............	10,366	1,701	6,917	6,818	86	13	379	590	603	34	101	7	12	22
5-9 YEARS.............	16,414	3,649	9,839	9,542	195	102	620	672	1,116	163	258	49	*	48
10-14 YEARS...........	16,483	3,162	10,280	9,963	219	98	604	600	1,371	157	219	54	*	36
15-19 YEARS...........	10,770	1,828	6,992	6,690	292	10	381	247	949	135	154	35	40	9
20-24 YEARS...........	8,810	1,144	5,782	5,601	166	15	227	251	1,024	96	159	89	*	38
25-29 YEARS...........	6,255	703	4,236	4,185	25	26	125	160	795	37	108	73	*	18
30-34 YEARS...........	5,325	817	3,520	3,465	51	4	148	83	503	41	98	18	91	6
35-39 YEARS...........	2,170	322	1,429	1,422	7	*	86	80	202	*	28	11	*	12
40 OR MORE YEARS......	1,250	317	693	676	17	*	41	59	110	*	20	4	*	*
NO REPORT.............	13,206	2,611	8,086	7,828	222	36	826	397	1,002	49	159	42	[illegible]	19

* NO CASES REPORTED

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TABLE B-10. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, YEARS OF PROFESSIONAL
CONTINUED EXPERIENCE, AND TYPE OF EMPLOYER: 1983

FIELD AND YEARS OF PROFESSIONAL EXPERIENCE	TOTAL EMPL	BUSINESS/INDUSTRY	EDUCATIONAL INSTITUTIONS TOTAL	4-YEAR COLL/UNIV	2-YEAR COLL	ELEM/SEC. SCHOOL	HOSPITAL/CLINIC	NON-PROFIT ORGS	FEDERAL GOV'T	MILITARY/COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NO REPORT
BIOLOGICAL SCIENTISTS														
TOTAL	53,205	7,730	38,046	36,780	1,025	241	1,296	2,344	4,622	214	591	170	91	101
1 OR LESS YEARS	1,190	98	858	851	7	*	40	109	71	7	*	7	*	*
2-4 YEARS	6,845	964	4,748	4,649	86	13	140	481	421	19	51	7	*	14
5-9 YEARS	10,486	2,014	6,754	6,536	132	86	312	453	776	28	107	42	*	*
10-14 YEARS	10,226	1,477	7,012	6,730	183	91	199	442	972	12	64	12	*	36
15-19 YEARS	6,529	703	4,695	4,400	285	10	190	175	578	84	104	*	*	*
20-24 YEARS	4,791	521	3,476	3,314	149	13	35	164	457	29	79	10	*	20
25-29 YEARS	3,561	438	2,442	2,418	19	5	66	121	302	7	36	51	*	18
30-34 YEARS	2,626	276	1,852	1,807	45	*	72	60	230	5	40	*	91	*
35-39 YEARS	1,041	76	776	769	7	*	20	35	114	*	8	5	*	7
40 OR MORE YEARS	676	135	392	386	6	*	20	45	70	*	14	*	*	*
NO REPORT	7,234	1,028	5,041	4,912	106	23	202	259	551	23	88	36	*	6
AGRICULTURAL SCIENTISTS														
TOTAL	14,536	3,583	8,189	8,036	132	21	5	305	2,036	*	259	36	58	[illegible]
1 OR LESS YEARS	172	60	94	94	*	*	*	*	18	*	*	*	*	*
2-4 YEARS	1,231	339	720	720	*	*	*	59	65	*	36	*	12	*
5-9 YEARS	2,245	707	1,128	1,086	42	*	*	101	201	*	75	*	*	33
10-14 YEARS	2,309	745	1,170	1,143	27	*	2	35	257	*	64	36	*	*
15-19 YEARS	1,588	481	780	780	*	*	3	32	244	*	*	*	39	9
20-24 YEARS	1,767	297	968	964	4	*	*	26	437	*	28	*	*	11
25-29 YEARS	1,239	63	810	783	6	21	*	23	327	*	16	*	*	*
30-34 YEARS	1,243	132	902	902	*	*	*	16	173	*	14	*	*	6
35-39 YEARS	516	120	315	315	*	*	*	13	68	*	*	*	*	*
40 OR MORE YEARS	218	69	143	143	*	*	*	*	6	*	*	*	*	*
NO REPORT	2,008	570	1,159	1,106	53	*	*	*	240	*	26	*	7	6
MEDICAL SCIENTISTS														
TOTAL	23,061	5,131	12,671	12,499	130	42	2,305	609	1,113	514	454	200	9	55
1 OR LESS YEARS	391	32	180	180	*	*	129	10	7	9	*	17	*	7
2-4 YEARS	2,290	398	1,449	1,449	*	*	239	50	117	15	14	*	*	8
5-9 YEARS	3,683	928	1,957	1,920	21	16	308	118	139	135	78	7	*	15
10-14 YEARS	3,948	940	2,098	2,082	9	7	403	123	142	145	91	6	*	*
15-19 YEARS	2,653	644	1,517	1,510	7	*	188	40	127	51	50	35	1	*
20-24 YEARS	2,252	326	1,338	1,323	13	2	192	61	130	67	52	79	*	7
25-29 YEARS	1,455	202	984	984	*	*	59	16	86	30	56	22	*	*
30-34 YEARS	1,456	409	766	756	6	4	76	7	100	36	44	18	*	*
35-39 YEARS	613	126	338	338	*	*	66	32	20	*	20	6	*	5
40 OR MORE YEARS	356	113	158	147	11	*	21	14	34	*	6	4	*	6
NO REPORT	3,964	1,013	1,886	1,810	63	13	624	138	211	26	45	6	8	7
PSYCHOLOGISTS														
TOTAL	46,645	13,020	22,182	19,377	951	1,854	6,042	1,773	1,191	188	1,250	898	*	101
1 OR LESS YEARS	453	147	175	172	3	*	49	51	*	4	*	*	*	27
2-4 YEARS	4,647	1,079	1,892	1,619	70	203	1,069	308	63	7	93	136	*	*
5-9 YEARS	10,425	3,065	4,506	4,053	69	384	1,580	484	214	45	296	235	*	*
10-14 YEARS	8,434	2,639	3,685	3,150	257	278	1,125	155	305	50	307	157	*	11
15-19 YEARS	4,714	1,274	2,616	2,226	153	237	397	126	47	5	180	52	*	17
20-24 YEARS	3,839	813	2,341	2,102	106	133	309	158	77	27	75	39	*	*
25-29 YEARS	3,054	674	1,741	1,479	166	96	276	108	111	*	38	101	*	5
30-34 YEARS	2,648	885	1,221	1,116	12	93	220	92	124	*	59	30	*	17
35-39 YEARS	830	220	505	447	21	37	26	17	54	*	*	8	*	*
40 OR MORE YEARS	409	133	208	181	22	5	4	56	8	*	*	*	*	*
NO REPORT	7,192	2,091	3,292	2,832	72	388	987	218	[illegible]	50	[illegible]	140	*	34
SOCIAL SCIENTISTS														
TOTAL	59,332	6,751	42,754	40,966	1,420	368	151	2,080	4,299	377	1,453	601	778	88
1 OR LESS YEARS	456	59	321	252	29	*	*	36	57	*	*	3	*	*
2-4 YEARS	3,394	355	2,374	2,223	78	73	25	188	234	76	28	61	34	19
5-9 YEARS	9,437	1,326	6,550	6,391	113	46	7	431	696	3	315	61	44	*
10-14 YEARS	11,011	1,553	7,376	7,037	297	42	14	451	888	*	394	111	224	*
15-19 YEARS	8,687	743	6,491	6,192	167	132	61	168	688	45	153	125	211	2
20-24 YEARS	5,285	676	3,888	3,762	126	*	27	136	326	96	42	29	63	2
25-29 YEARS	4,561	277	3,601	3,262	292	47	*	73	316	112	38	16	111	17
30-34 YEARS	3,037	246	2,364	2,310	54	*	*	95	170	40	58	29	17	17
35-39 YEARS	1,576	184	1,160	1,130	30	*	*	53	103	*	*	59	17	*
40 OR MORE YEARS	1,057	158	814	780	34	*	*	21	64	*	*	*	*	*
NO REPORT	10,831	1,174	7,815	7,587	200	28	17	428	777	5	420	107	57	31
ECONOMISTS														
TOTAL	16,956	2,779	11,362	11,264	98	*	15	219	1,692	5	141	92	617	36
1 OR LESS YEARS	117	6	111	111	*	*	*	*	*	*	*	*	*	*
2-4 YEARS	890	[illegible]	643	643	*	*	*	*	90	*	*	3	34	*
5-9 YEARS	2,608	485	1,798	1,798	*	*	*	14	274	*	21	*	16	*
10-14 YEARS	2,868	614	1,739	1,728	11	*	*	34	277	*	12	4	188	*
15-19 YEARS	2,631	378	1,551	1,540	11	*	*	73	351	*	*	77	201	*
20-24 YEARS	1,177	224	727	727	*	*	*	6	152	*	*	3	63	2
25-29 YEARS	1,422	[illegible]	1,107	1,048	59	*	*	3	67	*	*	*	48	17
30-34 YEARS	956	188	607	607	*	*	*	55	24	*	48	*	17	17
35-39 YEARS	681	119	557	557	*	*	*	*	*	*	*	5	*	*
40 OR MORE YEARS	319	70	206	206	*	*	*	*	43	*	*	*	*	*
NO REPORT	3,289	403	2,316	2,299	17	*	15	34	406	5	60	*	50	*
SOCIOLOGISTS/ANTHRO.														
TOTAL	12,056	801	10,369	9,841	443	85	37	431	121	27	183	46	53	8
1 OR LESS YEARS	134	25	106	106	*	*	*	*	*	*	*	3	*	*
2-4 YEARS	899	45	723	694	*	29	25	47	26	*	2	31	*	*
5-9 YEARS	1,858	197	1,470	1,421	45	4	7	120	41	*	*	*	23	*
10-14 YEARS	2,609	292	2,185	2,059	120	6	*	93	10	*	29	*	*	*
15-19 YEARS	1,646	39	1,588	1,499	66	23	*	4	5	*	*	*	10	*
20-24 YEARS	1,257	91	1,091	1,075	16	*	5	33	*	27	2	8	*	*
25-29 YEARS	764	14	733	641	92	*	*	17	*	*	*	*	*	*
30-34 YEARS	556	26	517	517	*	*	*	4	5	*	*	4	*	*
35-39 YEARS	209	*	188	184	4	*	*	4	*	*	*	*	17	*
40 OR MORE YEARS	140	4	136	113	23	*	*	*	*	*	*	*	*	*
NO REPORT	1,984	68	1,632	1,532	77	23	*	109	34	*	130	*	3	8

* NO CASES REPORTED

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TABLE B-10. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, YEARS OF PROFESSIONAL
CONTINUED EXPERIENCE, AND TYPE OF EMPLOYER: 1983

FIELD AND YEARS OF PROFESSIONAL EXPERIENCE	TOTAL EMPL	BUSINESS/ INDUSTRY	EDUCATIONAL INSTITUTIONS				HOSPITAL/ CLINIC	NON-PROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NO REPORT
			TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL								
OTHER SOCIAL SCIENTISTS														
TOTAL....................	30,318	3,171	21,023	19,861	879	283	99	1,439	2,486	345	1,149	[illegible]	108	44
1 OR LESS YEARS.......	205	28	104	75	29	*	*	36	37	*	*	*	*	*
2-4 YEARS.............	1,605	198	1,008	886	78	44	*	141	110	76	26	27	*	19
5-9 YEARS.............	4,371	644	3,282	3,172	68	42	*	297	381	3	298	61	5	*
10-14 YEARS...........	5,534	647	3,452	3,250	166	36	14	324	601	*	353	107	36	*
15-19 YEARS...........	4,410	326	3,352	3,153	90	109	61	91	332	45	153	48	*	2
20-24 YEARS...........	2,851	361	2,070	1,960	110	*	22	97	174	69	40	18	*	*
25-29 YEARS...........	2,375	83	1,761	1,573	141	47	*	53	249	112	38	16	63	*
30-34 YEARS...........	1,525	32	1,240	1,186	54	*	*	36	141	40	11	25	*	*
35-39 YEARS...........	606	65	415	389	26	*	*	49	103	*	*	54	*	*
40 OR MORE YEARS......	598	84	472	461	11	*	*	21	21	*	*	*	*	*
NO REPORT.............	5,558	703	3,867	3,756	106	5	2	285	337	*	230	107	4	23
ENGINEERS														
TOTAL....................	61,545	34,500	20,320	20,249	71	*	7	1,921	3,843	424	94	289	41	106
1 OR LESS YEARS.......	688	378	306	306	*	*	*	2	*	2	*	*	*	*
2-4 YEARS.............	4,323	2,804	1,186	1,183	3	*	*	222	100	2	3	4	2	*
5-9 YEARS.............	8,000	5,008	2,368	2,335	33	*	*	189	349	2	25	58	1	*
10-14 YEARS...........	9,973	6,200	2,784	2,784	*	*	7	249	599	93	*	34	5	2
15-19 YEARS...........	9,776	5,727	2,940	2,939	1	*	*	216	644	149	44	12	*	44
20-24 YEARS...........	7,412	4,056	2,722	2,715	7	*	*	42	562	30	*	*	*	*
25-29 YEARS...........	4,826	2,326	1,777	1,777	*	*	*	172	408	52	*	58	33	*
30-34 YEARS...........	4,140	1,936	1,573	1,561	12	*	*	288	281	15	*	33	*	14
35-39 YEARS...........	1,627	776	686	686	*	*	*	19	133	*	*	14	*	*
40 OR MORE YEARS......	1,312	598	510	495	15	*	*	91	100	*	*	13	*	*
NO REPORT.............	9,468	4,691	3,468	3,468	*	*	*	432	667	79	22	63	*	46
AERO/ASTRO ENGINEERS														
TOTAL....................	3,684	1,928	865	865	*	*	*	305	511	74	*	1	*	*
1 OR LESS YEARS.......	27	*	27	27	*	*	*	*	*	*	*	*	*	*
2-4 YEARS.............	205	140	29	29	*	*	*	36	*	*	*	*	*	*
5-9 YEARS.............	293	235	30	30	*	*	*	2	26	*	*	*	*	*
10-14 YEARS...........	571	287	112	112	*	*	*	*	172	*	*	*	*	*
15-19 YEARS...........	703	277	226	226	*	*	*	46	123	31	*	*	*	*
20-24 YEARS...........	401	280	66	66	*	*	*	11	44	*	*	*	*	*
25-29 YEARS...........	353	241	22	22	*	*	*	44	45	*	*	1	*	*
30-34 YEARS...........	138	66	36	36	*	*	*	14	22	*	*	*	*	*
35-39 YEARS...........	117	86	31	31	*	*	*	*	*	*	*	*	*	*
40 OR MORE YEARS......	63	48	15	15	*	*	*	*	*	*	*	*	*	*
NO REPORT.............	813	268	271	271	*	*	*	152	79	43	*	*	*	*
CHEMICAL ENGINEERS														
TOTAL....................	6,992	4,788	1,722	1,722	*	*	*	202	174	48	*	*	*	58
1 OR LESS YEARS.......	191	132	57	57	*	*	*	*	*	2	*	*	*	*
2-4 YEARS.............	867	414	375	375	*	*	*	78	*	*	*	*	*	*
5-9 YEARS.............	1,033	816	188	188	*	*	*	*	29	*	*	*	*	*
10-14 YEARS...........	1,137	880	166	166	*	*	*	*	45	46	*	*	*	*
15-19 YEARS...........	784	552	188	188	*	*	*	*	*	*	*	*	*	44
20-24 YEARS...........	789	483	255	255	*	*	*	*	51	*	*	*	*	*
25-29 YEARS...........	543	439	70	70	*	*	*	*	34	*	*	*	*	*
30-34 YEARS...........	520	304	125	125	*	*	*	62	15	*	*	*	*	14
35-39 YEARS...........	124	109	15	15	*	*	*	*	*	*	*	*	*	*
40 OR MORE YEARS......	108	93	15	15	*	*	*	*	*	*	*	*	*	*
NO REPORT.............	896	566	268	268	*	*	*	62	*	*	*	*	*	*
CIVIL ENGINEERS														
TOTAL....................	5,317	1,895	3,138	3,121	17	*	*	16	79	42	17	129	1	*
1 OR LESS YEARS.......	78	*	78	78	*	*	*	*	*	*	*	*	*	*
2-4 YEARS.............	236	147	83	83	*	*	*	*	2	*	*	4	*	*
5-9 YEARS.............	602	220	353	353	*	*	*	10	1	*	17	*	1	*
10-14 YEARS...........	789	372	415	415	*	*	*	*	2	*	*	*	*	*
15-19 YEARS...........	816	383	370	370	*	*	*	*	35	22	*	6	*	*
20-24 YEARS...........	768	298	452	450	2	*	*	*	13	5	*	*	*	*
25-29 YEARS...........	486	111	327	327	*	*	*	*	6	*	*	42	*	*
30-34 YEARS...........	463	77	371	371	*	*	*	*	*	15	*	*	*	*
35-39 YEARS...........	106	15	77	77	*	*	*	*	*	*	*	14	*	*
40 OR MORE YEARS......	198	106	78	63	15	*	*	*	14	*	*	*	*	*
NO REPORT.............	775	166	534	534	*	*	*	6	6	*	*	63	*	*
ELEC./ELECTRON. ENGINEERS														
TOTAL....................	12,696	7,615	3,960	3,959	1	*	*	218	776	65	47	15	*	*
1 OR LESS YEARS.......	76	60	16	16	*	*	*	*	*	*	*	*	*	*
2-4 YEARS.............	604	554	45	45	*	*	*	2	*	*	3	*	*	*
5-9 YEARS.............	1,746	1,156	522	522	*	*	*	22	46	*	*	*	*	*
10-14 YEARS...........	1,992	1,271	505	505	*	*	*	76	140	*	*	*	*	*
15-19 YEARS...........	2,421	1,424	596	595	1	*	*	37	255	65	44	*	*	*
20-24 YEARS...........	1,528	973	480	480	*	*	*	*	75	*	*	*	*	*
25-29 YEARS...........	667	347	305	305	*	*	*	*	*	*	*	15	*	*
30-34 YEARS...........	1,004	498	440	440	*	*	*	20	46	*	*	*	*	*
35-39 YEARS...........	288	84	173	173	*	*	*	13	18	*	*	*	*	*
40 OR MORE YEARS......	223	47	147	147	*	*	*	2	27	*	*	*	*	*
NO REPORT.............	2,147	1,201	731	731	*	*	*	46	169	*	*	*	*	*
MATERIALS SCI. ENGINEERS														
TOTAL....................	7,422	4,893	1,820	1,820	*	*	*	237	472	*	*	*	*	*
1 OR LESS YEARS.......	31	31	*	*	*	*	*	*	*	*	*	*	*	*
2-4 YEARS.............	692	454	165	165	*	*	*	37	36	*	*	*	*	*
5-9 YEARS.............	997	608	273	273	*	*	*	*	36	*	*	*	*	*
10-14 YEARS...........	1,299	1,065	155	155	*	*	*	45	34	*	*	*	*	*
15-19 YEARS...........	1,093	836	204	204	*	*	*	30	23	*	*	*	*	*
20-24 YEARS...........	829	380	316	316	*	*	*	31	102	*	*	*	*	*
25-29 YEARS...........	727	413	189	189	*	*	*	50	75	*	*	*	*	*
30-34 YEARS...........	523	333	100	100	*	*	*	44	46	*	*	*	*	*
35-39 YEARS...........	254	116	123	123	*	*	*	*	15	*	*	*	*	*
40 OR MORE YEARS......	247	166	81	81	*	*	*	*	*	*	*	*	*	*
NO REPORT.............	730	411	214	214	*	*	*	*	105	*	*	*	*	*

* NO CASES REPORTED

TABLE B-10. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, YEARS OF PROFESSIONAL
CONTINUED EXPERIENCE, AND TYPE OF EMPLOYER: 1983

FIELD AND YEARS OF PROFESSIONAL EXPERIENCE	TOTAL EMPL	BUSINESS/ INDUSTRY	EDUCATIONAL INSTITUTIONS											
			TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL	HOSPITAL/ CLINIC	NON-PROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. COMPS	STATE GOV'T	OTHER GOV'T	OTHER	NO REPORT
MECHANICAL ENGINEERS														
TOTAL....................	5,657	2,596	2,578	2,540	18	*	*	107	353	23	*	*	*	*
1 OR LESS YEARS.......	45	10	35	35	*	*	*	*	*	*	*	*	*	*
2-4 YEARS.............	267	127	140	137	3	*	*	*	*	*	*	*	*	*
5-9 YEARS.............	631	357	243	243	*	*	*	2	29	*	*	*	*	*
10-14 YEARS...........	1,205	788	371	371	*	*	*	*	46	*	*	*	*	*
15-19 YEARS...........	825	433	291	291	*	*	*	22	79	*	*	*	*	*
20-24 YEARS...........	788	258	507	504	3	*	*	*	*	23	*	*	*	*
25-29 YEARS...........	738	310	303	303	*	*	*	*	125	*	*	*	*	*
30-34 YEARS...........	312	60	169	157	12	*	*	83	*	*	*	*	*	*
35-39 YEARS...........	104	15	89	89	*	*	*	*	*	*	*	*	*	*
40 OR MORE YEARS......	137	*	104	104	*	*	*	*	33	*	*	*	*	*
NO REPORT.............	605	238	326	326	*	*	*	*	41	*	*	*	*	*
NUCLEAR ENGINEERS														
TOTAL....................	2,329	1,380	674	674	*	*	*	67	148	*	*	58	2	*
1 OR LESS YEARS.......	27	27	*	*	*	*	*	*	*	*	*	*	*	*
2-4 YEARS.............	99	30	35	35	*	*	*	32	*	*	*	*	2	*
5-9 YEARS.............	409	239	110	110	*	*	*	*	2	*	*	58	*	*
10-14 YEARS...........	489	391	87	87	*	*	*	*	11	*	*	*	*	*
15-19 YEARS...........	401	249	108	108	*	*	*	*	44	*	*	*	*	*
20-24 YEARS...........	229	118	89	89	*	*	*	*	22	*	*	*	*	*
25-29 YEARS...........	161	36	69	69	*	*	*	22	34	*	*	*	*	*
30-34 YEARS...........	126	85	28	28	*	*	*	13	*	*	*	*	*	*
35-39 YEARS...........	71	57	14	14	*	*	*	*	*	*	*	*	*	*
40 OR MORE YEARS......	87	48	26	26	*	*	*	*	13	*	*	*	*	*
NO REPORT.............	230	100	108	108	*	*	*	*	22	*	*	*	*	*
SYSTEMS DESIGN ENGINEERS														
TOTAL....................	3,891	2,252	881	881	*	*	*	396	252	88	22	*	*	*
1 OR LESS YEARS.......	30	16	14	14	*	*	*	*	*	*	*	*	*	*
2-4 YEARS.............	352	300	38	38	*	*	*	14	*	*	*	*	*	*
5-9 YEARS.............	534	321	97	97	*	*	*	81	35	*	*	*	*	*
10-14 YEARS...........	668	316	258	258	*	*	*	52	21	21	*	*	*	*
15-19 YEARS...........	777	478	193	193	*	*	*	54	21	31	*	*	*	*
20-24 YEARS...........	403	264	37	37	*	*	*	*	102	*	*	*	*	*
25-29 YEARS...........	157	99	16	16	*	*	*	42	*	*	*	*	*	*
30-34 YEARS...........	238	140	60	60	*	*	*	38	*	*	*	*	*	*
35-39 YEARS...........	67	36	26	26	*	*	*	5	*	*	*	*	*	*
40 OR MORE YEARS......	42	14	*	*	*	*	*	28	*	*	*	*	*	*
NO REPORT.............	623	268	142	142	*	*	*	82	73	36	22	*	*	*
OTHER ENGINEERS														
TOTAL....................	13,557	7,153	4,682	4,647	35	*	7	373	1,078	84	8	86	38	48
1 OR LESS YEARS.......	183	102	79	79	*	*	*	2	*	*	*	*	*	*
2-4 YEARS.............	1,001	638	276	276	*	*	*	23	62	2	*	*	*	*
5-9 YEARS.............	1,755	976	552	519	33	*	*	72	145	2	8	*	*	*
10-14 YEARS...........	1,823	830	715	715	*	*	7	76	128	26	*	34	5	2
15-19 YEARS...........	1,956	1,095	764	764	*	*	*	27	64	*	*	6	*	*
20-24 YEARS...........	1,677	1,002	520	518	2	*	*	*	153	2	*	*	*	*
25-29 YEARS...........	994	330	476	476	*	*	*	14	89	52	*	*	33	*
30-34 YEARS...........	816	373	244	244	*	*	*	14	152	*	*	33	*	*
35-39 YEARS...........	496	258	138	138	*	*	*	*	100	*	*	*	*	*
40 OR MORE YEARS......	207	76	44	44	*	*	*	61	13	*	*	13	*	*
NO REPORT.............	2,649	1,473	874	874	*	*	*	84	172	*	*	*	*	46

* NO CASES REPORTED

SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE B-11. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, YEARS OF PROFESSIONAL EXPERIENCE, AND PRIMARY WORK ACTIVITY: 1983

		RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN							
FIELD AND YEARS OF PROFESSIONAL EXPERIENCE	TOTAL EMPL	TOTAL	BASIC RE-SEARCH	APPL'D RE-SEARCH	DEVEL-OPMENT	TOTAL	OF R&D	OF OTHER	TEACH-ING	CON-SULT-ING	SALES/ PROF. SER-VICES	OTHER	NO REPORT
ALL FIELDS													
TOTAL	369,320	124,788	57,137	47,374	20,277	61,813	31,418	30,395	108,236	12,746	29,820	24,163	7,754
1 OR LESS YEARS	4,728	3,005	1,871	800	334	115	45	70	585	81	459	398	85
2-4 YEARS	31,451	17,404	9,700	5,605	2,099	1,065	727	338	6,209	806	3,635	1,961	371
5-9 YEARS	60,824	26,877	12,772	9,800	4,305	5,808	3,282	2,526	15,268	1,716	6,884	3,830	441
10-14 YEARS	64,420	21,625	9,605	8,439	3,581	11,856	6,653	5,197	18,148	2,214	5,235	4,769	579
15-19 YEARS	50,189	14,394	5,836	5,923	2,635	11,018	6,067	4,951	16,693	1,769	2,820	3,081	414
20-24 YEARS	36,620	9,226	3,754	3,582	1,890	8,666	3,749	4,917	13,067	1,140	2,122	2,153	246
25-29 YEARS	26,947	7,247	2,895	3,195	1,157	6,389	3,032	3,357	9,472	658	1,419	1,572	190
30-34 YEARS	21,510	5,783	2,482	2,416	885	4,798	2,278	2,520	6,802	1,058	1,485	1,447	137
35-39 YEARS	8,996	2,034	1,022	793	219	2,203	935	1,268	3,020	582	350	717	90
40 OR MORE YEARS	6,439	1,514	639	590	285	1,166	594	572	1,901	691	264	778	125
NO REPORT	57,196	15,679	6,561	6,231	2,887	8,735	4,056	4,679	17,071	2,031	5,147	3,457	5,076
SCIENTISTS													
TOTAL	307,775	100,042	54,038	35,490	10,514	46,321	20,881	25,440	96,403	8,999	28,568	20,435	7,007
1 OR LESS YEARS	4,040	2,396	1,781	411	204	115	45	70	567	81	452	344	85
2-4 YEARS	27,128	14,807	9,405	4,327	1,075	770	444	326	5,305	684	3,612	1,590	360
5-9 YEARS	52,824	22,256	12,097	7,604	2,555	4,617	2,275	2,342	13,808	1,316	6,852	3,534	441
10-14 YEARS	54,447	17,221	9,001	6,163	2,057	9,211	4,436	4,775	16,662	1,655	4,996	4,172	530
15-19 YEARS	40,413	11,143	5,466	4,400	1,277	7,874	3,871	4,003	14,794	1,083	2,760	2,433	326
20-24 YEARS	29,208	6,947	3,530	2,576	841	6,310	2,454	3,856	11,474	729	1,895	1,650	203
25-29 YEARS	22,121	5,909	2,792	2,654	463	4,618	1,912	2,706	8,429	459	1,209	1,307	190
30-34 YEARS	17,370	4,536	2,351	1,811	374	3,420	1,491	1,929	5,977	679	1,418	1,217	123
35-39 YEARS	7,369	1,628	941	649	38	1,739	697	1,042	2,673	443	336	460	90
40 OR MORE YEARS	5,127	1,155	625	470	60	850	414	436	1,594	498	245	693	92
NO REPORT	47,728	12,044	6,049	4,425	1,570	6,797	2,842	3,955	15,120	1,372	4,793	3,035	4,567
PHYSICAL SCIENTISTS													
TOTAL	63,986	29,053	14,049	11,520	3,484	11,845	8,793	3,052	14,652	925	1,641	4,528	1,342
1 OR LESS YEARS	761	587	440	78	69	45	*	45	71	*	23	32	3
2-4 YEARS	5,193	4,087	2,269	1,411	407	70	52	18	576	11	89	335	25
5-9 YEARS	9,095	5,978	3,009	2,188	781	1,062	980	82	1,153	28	285	543	46
10-14 YEARS	10,076	4,638	2,125	1,899	614	2,041	1,460	581	2,249	118	266	674	90
15-19 YEARS	9,821	3,569	1,565	1,659	345	2,457	1,977	480	2,965	83	155	533	59
20-24 YEARS	6,989	2,497	1,098	1,038	361	1,565	984	581	2,137	101	198	448	43
25-29 YEARS	5,493	1,967	650	1,138	179	1,255	881	374	1,522	83	173	483	10
30-34 YEARS	4,032	1,636	898	552	186	733	564	169	868	53	177	525	40
35-39 YEARS	1,771	374	242	109	23	604	433	171	612	48	*	131	2
40 OR MORE YEARS	1,624	406	187	202	17	307	221	86	488	131	4	228	60
NO REPORT	9,131	3,314	1,566	1,246	502	1,706	1,241	465	2,011	269	271	596	964
CHEMISTS													
TOTAL	41,298	17,985	7,901	7,629	2,455	8,258	6,533	1,725	8,995	654	1,173	3,539	694
1 OR LESS YEARS	608	493	350	74	69	22	*	22	56	*	3	31	3
2-4 YEARS	3,648	2,877	1,492	1,058	327	45	27	18	362	*	65	289	10
5-9 YEARS	6,198	3,774	1,643	1,545	586	905	837	68	829	26	187	447	30
10-14 YEARS	5,998	2,461	1,068	1,073	320	1,358	1,071	287	1,453	52	185	458	31
15-19 YEARS	6,037	1,984	777	948	259	1,595	1,348	247	1,870	65	129	361	33
20-24 YEARS	4,103	1,317	514	597	206	1,044	709	335	1,161	66	147	361	7
25-29 YEARS	3,856	1,481	378	958	145	919	692	227	903	37	115	391	10
30-34 YEARS	2,780	1,171	641	344	186	522	416	106	392	34	149	472	40
35-39 YEARS	1,154	216	117	76	23	428	345	83	344	35	*	131	*
40 OR MORE YEARS	1,113	242	161	81	*	186	152	34	321	118	4	195	47
NO REPORT	5,803	1,969	760	875	334	1,234	936	298	1,304	221	189	403	483
PHYSICISTS/ASTRONOMERS													
TOTAL	22,688	11,068	6,148	3,891	1,029	3,587	2,260	1,327	5,657	271	468	909	648
1 OR LESS YEARS	153	94	90	4	*	23	*	23	15	*	20	1	*
2-4 YEARS	1,545	1,210	777	353	80	25	25	*	214	11	24	46	15
5-9 YEARS	2,897	2,204	1,366	643	195	157	143	14	324	2	98	96	16
10-14 YEARS	4,078	2,177	1,057	826	294	683	389	294	796	66	81	216	59
15-19 YEARS	3,784	1,585	788	711	86	862	629	233	1,095	18	26	172	26
20-24 YEARS	2,886	1,180	584	441	155	521	275	246	976	35	51	87	36
25-29 YEARS	1,637	486	272	180	34	336	189	147	619	[illegible]	58	92	*
30-34 YEARS	1,252	465	257	208	*	211	148	63	476	19	[illegible]	53	*
35-39 YEARS	617	158	125	33	*	176	88	88	268	13	*	*	2
40 OR MORE YEARS	511	164	26	121	17	121	69	52	167	13	*	33	13
NO REPORT	3,328	1,345	806	371	168	472	305	167	707	48	82	193	481
MATHEMATICAL SCIENTISTS													
TOTAL	16,379	3,403	1,767	1,146	490	1,496	531	965	9,701	599	261	327	592
1 OR LESS YEARS	137	95	44	37	14	*	*	*	40	2	*	*	*
2-4 YEARS	1,120	376	233	82	61	8	5	3	621	83	4	16	12
5-9 YEARS	2,275	617	335	164	118	108	68	40	1,267	138	92	23	30
10-14 YEARS	2,665	551	262	238	51	221	122	99	1,625	111	68	69	20
15-19 YEARS	2,540	466	280	118	68	335	80	255	1,508	96	41	81	13
20-24 YEARS	1,834	211	110	68	33	337	72	265	1,218	23	16	29	*
25-29 YEARS	1,101	176	85	67	24	119	*	119	737	13	12	14	30
30-34 YEARS	849	158	87	71	*	67	17	50	573	30	7	2	12
35-39 YEARS	402	117	48	61	8	38	13	25	230	17	*	*	*
40 OR MORE YEARS	257	20	8	12	*	8	8	*	157	39	*	19	14
NO REPORT	3,199	616	275	228	113	255	146	109	1,725	47	21	74	461
MATHEMATICIANS													
TOTAL	13,509	2,809	1,608	790	411	1,128	258	870	8,324	296	237	247	548
1 OR LESS YEARS	133	95	44	37	14	*	*	*	38	*	*	*	*
2-4 YEARS	916	322	197	79	46	5	5	*	510	63	4	*	12
5-9 YEARS	1,732	490	296	93	101	90	54	36	951	85	[illegible]	8	30
10-14 YEARS	2,177	456	261	146	49	167	68	99	1,420	24	[illegible]	24	20
15-19 YEARS	2,214	442	280	94	68	269	28	241	1,334	34	[illegible]	81	13
20-24 YEARS	1,398	142	83	37	22	216	24	192	998	*	[illegible]	29	*
25-29 YEARS	970	143	85	56	2	119	*	119	650	13	[illegible]	14	19
30-34 YEARS	747	150	81	69	*	64	15	49	504	8	7	2	12
35-39 YEARS	360	90	48	42	*	38	13	25	222	10	*	*	*
40 OR MORE YEARS	190	16	8	8	*	8	8	*	125	15	*	19	7
NO REPORT	2,752	463	225	129	109	152	43	109	1,572	44	16	[illegible]	435

* NO CASES REPORTED

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TABLE B-11. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, YEARS OF PROFESSIONAL
CONTINUED EXPERIENCE, AND PRIMARY WORK ACTIVITY: 1983

FIELD AND YEARS OF PROFESSIONAL EXPERIENCE	TOTAL EMPL	RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN							
		TOTAL	BASIC RE-SEARCH	APPL'D RE-SEARCH	DEVEL-OPMENT	TOTAL	OF R&D	OF OTHER	TEACH-ING	CON-SULT-ING	SALES/ PROF. SER-VICES	OTHER	NO REPORT
STATISTICIANS													
TOTAL....................	2,790	594	159	356	79	360	273	95	1,377	303	24	80	44
1 OR LESS YEARS.......	4	*	*	*	*	*	*	*	2	2	*	*	*
2-4 YEARS.............	204	54	36	3	15	3	*	3	111	20	*	16	*
5-9 YEARS.............	543	127	39	71	17	18	14	4	316	53	14	15	*
10-14 YEARS...........	488	95	1	92	2	54	54	*	205	87	2	45	*
15-19 YEARS...........	326	24	*	24	*	66	52	14	174	62	*	*	*
20-24 YEARS...........	436	69	27	31	11	121	48	73	220	23	3	*	*
25-29 YEARS...........	131	33	*	11	22	*	*	*	87	*	*	*	11
30-34 YEARS...........	102	8	6	2	*	3	2	1	69	22	*	*	*
35-39 YEARS...........	42	27	*	19	8	*	*	*	8	7	*	*	*
40 OR MORE YEARS......	67	4	*	4	*	*	*	*	32	24	*	*	7
NO REPORT.............	447	153	50	99	4	103	103	*	153	3	5	4	26
COMPUTER/INFORMATION SPECIALISTS													
TOTAL....................	12,164	5,400	615	893	3,892	2,052	1,114	938	2,361	678	375	1,181	117
1 OR LESS YEARS.......	197	108	30	1	77	*	*	*	20	*	4	65	*
2-4 YEARS.............	985	491	135	106	250	94	94	*	176	67	53	102	2
5-9 YEARS.............	2,570	1,315	161	240	914	220	112	108	644	56	52	271	12
10-14 YEARS...........	2,787	1,126	51	215	860	530	354	176	504	261	93	261	12
15-19 YEARS...........	1,480	707	64	118	525	292	167	125	294	35	41	81	30
20-24 YEARS...........	863	347	13	70	264	263	128	135	196	4	18	35	*
25-29 YEARS...........	525	242	13	44	185	134	89	45	94	7	24	24	*
30-34 YEARS...........	461	178	44	35	99	80	19	61	80	99	5	15	4
35-39 YEARS...........	102	8	8	*	*	9	1	8	32	8	*	45	*
40 OR MORE YEARS......	132	43	*	*	43	20	*	20	21	*	*	48	*
NO REPORT.............	2,062	835	96	64	675	410	150	260	300	141	85	234	57
ENVIRONMENTAL SCIENTISTS													
TOTAL....................	16,467	6,728	3,287	3,112	329	3,129	1,825	1,304	3,435	1,198	242	1,445	290
1 OR LESS YEARS.......	283	149	83	53	13	13	13	*	66	13	*	42	*
2-4 YEARS.............	1,423	946	509	425	12	67	33	34	188	119	2	93	8
5-9 YEARS.............	2,608	1,479	740	580	159	319	172	147	381	95	94	238	2
10-14 YEARS...........	2,991	1,258	464	744	50	515	322	193	569	226	63	345	15
15-19 YEARS...........	2,401	771	360	357	54	662	483	179	567	219	20	162	*
20-24 YEARS...........	1,588	318	167	143	8	517	254	263	381	157	26	173	16
25-29 YEARS...........	1,132	383	262	113	8	315	191	124	283	49	16	86	*
30-34 YEARS...........	1,018	342	139	195	8	306	123	183	202	47	*	114	7
35-39 YEARS...........	518	151	95	49	7	58	44	14	121	95	6	78	9
40 OR MORE YEARS......	398	100	38	62	*	55	33	22	93	79	7	57	7
NO REPORT.............	2,107	831	430	391	10	302	157	145	584	99	8	57	226
EARTH SCIENTISTS													
TOTAL....................	12,523	4,355	1,852	2,257	246	2,480	1,270	1,210	2,918	1,073	199	1,269	229
1 OR LESS YEARS.......	204	112	72	27	13	13	13	*	27	13	*	39	*
2-4 YEARS.............	999	595	246	337	12	64	30	34	159	119	2	52	8
5-9 YEARS.............	1,892	950	407	433	110	236	109	127	305	93	82	224	2
10-14 YEARS...........	2,092	702	209	456	37	352	184	168	497	177	34	315	15
15-19 YEARS...........	1,752	383	137	206	40	511	340	171	512	187	18	141	*
20-24 YEARS...........	1,383	260	113	139	8	432	190	242	342	148	26	167	8
25-29 YEARS...........	977	340	219	113	8	260	150	110	245	42	16	74	*
30-34 YEARS...........	767	231	105	118	8	249	66	183	171	47	*	67	2
35-39 YEARS...........	470	138	89	49	*	39	25	14	114	95	6	78	*
40 OR MORE YEARS......	315	74	24	50	*	42	26	16	57	71	7	57	7
NO REPORT.............	1,672	570	231	329	10	282	137	145	489	81	8	55	187
OCEANOGRAPHERS													
TOTAL....................	1,742	1,030	771	243	16	311	257	54	188	46	43	72	52
1 OR LESS YEARS.......	23	18	5	13	*	*	*	*	2	*	*	3	*
2-4 YEARS.............	186	150	120	30	*	3	3	*	4	*	*	29	*
5-9 YEARS.............	413	302	202	84	16	68	63	5	27	2	12	2	*
10-14 YEARS...........	345	180	136	44	*	70	45	25	25	30	29	11	*
15-19 YEARS...........	238	145	112	33	*	42	34	8	26	*	2	13	*
20-24 YEARS...........	147	45	45	*	*	56	40	16	31	7	*	*	8
25-29 YEARS...........	71	22	22	*	*	33	33	*	16	*	*	*	*
30-34 YEARS...........	54	18	12	6	*	13	13	*	6	*	*	12	5
35-39 YEARS...........	6	*	*	*	*	6	6	*	*	*	*	*	*
40 OR MORE YEARS......	14	14	14	*	*	*	*	*	*	*	*	*	*
NO REPORT.............	255	136	103	33	*	20	20	*	51	7	*	2	39
ATMOSPHERIC SCIENTISTS													
TOTAL....................	2,202	1,343	664	612	67	338	298	40	329	79	*	104	9
1 OR LESS YEARS.......	56	19	6	13	*	*	*	*	37	*	*	*	*
2-4 YEARS.............	238	201	143	58	*	*	*	*	25	*	*	12	*
5-9 YEARS.............	303	227	131	63	33	15	*	15	49	*	*	12	*
10-14 YEARS...........	554	376	119	244	13	93	93	*	47	19	*	19	*
15-19 YEARS...........	421	243	111	118	14	109	109	*	29	32	*	8	*
20-24 YEARS...........	58	13	9	4	*	29	24	5	8	2	*	6	*
25-29 YEARS...........	84	21	21	*	*	22	8	14	22	7	*	12	*
30-34 YEARS...........	197	93	22	71	*	44	44	*	25	*	*	35	*
35-39 YEARS...........	42	13	6	*	7	13	13	*	7	*	*	*	9
40 OR MORE YEARS......	69	12	*	12	*	13	7	6	36	8	*	*	*
NO REPORT.............	180	125	96	29	*	*	*	*	44	11	*	*	*
LIFE SCIENTISTS													
TOTAL....................	92,802	41,023	28,784	10,707	1,532	12,971	6,165	6,806	22,452	1,981	6,223	5,566	2,586
1 OR LESS YEARS	1,753	1,136	964	156	16	28	5	23	176	6	214	140	53
2-4 YEARS.............	10,366	7,317	5,543	1,475	299	238	169	69	1,252	146	697	584	132
5-9 YEARS.............	16,414	8,879	6,403	2,129	347	1,180	691	489	3,251	383	1,404	1,125	192
10-14 YEARS...........	16,483	7,229	5,214	1,696	319	2,517	1,387	1,130	4,069	246	1,023	1,216	183
15-19 YEARS...........	10,770	4,064	2,654	1,247	163	1,862	833	1,029	3,231	250	557	680	126
20-24 YEARS...........	8,810	2,823	1,907	845	71	2,010	790	1,220	2,968	150	446	350	63
25-29 YEARS...........	6,255	2,168	1,375	761	32	1,311	602	709	2,037	127	210	312	90
30-34 YEARS...........	5,325	1,766	1,057	646	63	1,232	574	658	1,631	133	264	273	26
35-39 YEARS...........	2,170	702	443	259	*	465	133	332	597	131	119	81	75
40 OR MORE YEARS......	1,250	316	222	94	*	241	136	105	272	137	104	173	7
NO REPORT.............	13,206	4,623	3,002	1,399	222	1,887	845	1,042	2,968	272	1,185	632	1,639

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TABLE B-11. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, YEARS OF PROFESSIONAL
CONTINUED EXPERIENCE, AND PRIMARY WORK ACTIVITY: 1983

FIELD AND YEARS OF PROFESSIONAL EXPERIENCE	TOTAL EMPL	RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN							
		TOTAL	BASIC RE-SEARCH	APPL'D RE-SEARCH	DEVEL-OPMENT	TOTAL	OF R&D	OF OTHER	TEACH-ING	CON-SULT-ING	SALES/ PROF. SER-VICES	OTHER	NO REPORT
BIOLOGICAL SCIENTISTS													
TOTAL....................	55,205	28,080	23,129	4,312	639	5,875	2,835	3,040	15,156	886	1,139	2,504	1,565
1 OR LESS YEARS.......	1,190	917	833	75	9	15	*	15	134	*	33	65	26
2-4 YEARS.............	6,845	5,406	4,532	750	124	118	89	29	833	52	63	311	62
5-9 YEARS.............	10,486	6,451	5,405	933	113	609	396	213	2,261	197	333	545	90
10-14 YEARS...........	10,226	5,088	4,268	701	119	1,179	768	411	2,967	144	165	537	146
15-19 YEARS...........	6,529	2,792	2,104	604	84	809	359	450	2,355	131	104	258	80
20-24 YEARS...........	4,791	1,712	1,485	206	21	697	196	501	2,046	62	97	153	24
25-29 YEARS...........	3,561	1,341	1,046	289	6	674	312	362	1,235	31	72	132	76
30-34 YEARS...........	2,626	937	749	161	27	449	174	275	974	62	82	109	13
35-39 YEARS...........	1,041	376	301	75	*	206	56	150	350	27	5	21	56
40 OR MORE YEARS......	676	218	189	29	*	137	73	64	163	74	*	83	1
NO REPORT.............	7,234	2,842	2,217	489	136	982	412	570	1,838	106	185	290	991
AGRICULTURAL SCIENTISTS													
TOTAL....................	14,536	6,213	1,653	4,200	360	2,833	1,609	1,224	2,489	465	617	1,498	421
1 OR LESS YEARS.......	172	109	60	49	*	6	3	3	21	*	*	31	5
2-4 YEARS.............	1,231	752	219	424	109	71	58	13	169	43	41	129	26
5-9 YEARS.............	2,245	998	209	692	97	211	165	46	368	64	161	384	59
10-14 YEARS...........	2,309	1,004	222	697	85	518	316	202	346	38	115	270	18
15-19 YEARS...........	1,588	673	219	432	22	353	213	140	203	39	32	258	30
20-24 YEARS...........	1,767	690	193	490	7	522	310	212	307	59	99	68	22
25-29 YEARS...........	1,239	515	152	347	16	290	165	125	291	55	7	74	7
30-34 YEARS...........	1,243	573	135	422	16	303	133	170	258	23	17	56	13
35-39 YEARS...........	516	160	58	102	*	136	51	85	111	64	17	41	7
40 OR MORE YEARS......	218	45	7	38	*	58	42	16	50	14	7	44	*
NO REPORT.............	2,008	694	179	507	8	365	153	212	365	86	121	143	234
MEDICAL SCIENTISTS													
TOTAL....................	23,061	6,730	4,002	2,195	533	4,263	1,721	2,542	4,807	630	4,467	1,564	600
1 OR LESS YEARS.......	391	110	71	32	7	7	2	5	21	6	181	44	22
2-4 YEARS.............	2,290	1,159	792	301	66	49	22	27	250	51	593	144	44
5-9 YEARS.............	3,683	1,430	789	504	137	360	130	230	622	122	910	196	43
10-14 YEARS...........	3,948	1,137	724	298	115	820	303	517	756	64	743	409	19
15-19 YEARS...........	2,653	599	331	211	57	700	261	439	673	80	421	164	16
20-24 YEARS...........	2,252	421	229	149	43	791	284	507	615	29	250	129	17
25-29 YEARS...........	1,455	312	177	125	10	347	125	222	511	41	131	106	7
30-34 YEARS...........	1,456	256	173	63	20	480	267	213	399	48	165	108	*
35-39 YEARS...........	613	166	84	82	*	123	26	97	136	60	97	19	12
40 OR MORE YEARS......	356	53	26	27	*	46	21	25	59	49	97	46	6
NO REPORT.............	3,964	1,087	606	403	78	540	280	260	765	80	879	199	414
PSYCHOLOGISTS													
TOTAL....................	46,645	5,017	2,344	2,360	313	5,608	903	4,705	12,708	2,084	18,488	2,081	659
1 OR LESS YEARS.......	453	67	52	*	15	27	27	*	44	60	211	15	29
2-4 YEARS.............	4,647	702	315	366	21	65	18	47	746	164	2,735	163	72
5-9 YEARS.............	10,425	1,527	636	721	170	1,079	146	933	2,295	394	4,654	374	102
10-14 YEARS...........	8,434	832	427	346	59	1,107	176	931	2,261	406	3,354	395	79
15-19 YEARS...........	4,714	392	201	170	21	639	70	569	1,459	255	1,696	226	47
20-24 YEARS...........	3,839	222	109	113	*	673	95	578	1,565	181	999	178	21
25-29 YEARS...........	3,054	396	222	165	9	464	57	407	1,187	93	750	144	20
30-34 YEARS...........	2,648	222	46	172	4	440	104	336	784	161	905	136	*
35-39 YEARS...........	830	101	44	57	*	105	12	93	300	69	170	85	*
40 OR MORE YEARS......	409	43	43	*	*	85	16	69	125	25	88	39	4
NO REPORT.............	7,192	513	249	250	14	924	182	742	1,942	276	2,926	326	285
SOCIAL SCIENTISTS													
TOTAL....................	59,332	9,418	3,192	5,752	474	9,220	1,550	7,670	31,094	1,534	1,338	5,307	1,421
1 OR LESS YEARS.......	456	254	168	86	*	2	*	2	150	*	*	50	*
2-4 YEARS.............	3,394	888	401	462	25	228	73	155	1,746	94	32	297	109
5-9 YEARS.............	9,437	2,461	813	1,582	66	649	106	543	4,817	222	271	960	57
10-14 YEARS...........	11,011	1,587	458	1,025	104	2,280	615	1,665	5,385	287	129	1,212	131
15-19 YEARS...........	8,687	1,174	342	731	101	1,627	261	1,366	4,770	145	250	670	51
20-24 YEARS...........	5,285	529	126	299	104	945	131	814	3,009	113	192	437	60
25-29 YEARS...........	4,561	577	185	366	26	1,020	92	928	2,569	87	24	244	40
30-34 YEARS...........	3,037	234	80	140	14	562	90	472	1,839	156	60	152	34
35-39 YEARS...........	1,576	175	61	114	*	460	61	399	781	75	41	40	4
40 OR MORE YEARS......	1,057	227	127	100	*	134	*	134	438	87	42	129	*
NO REPORT.............	10,831	1,312	431	847	34	1,313	121	1,192	5,590	268	297	1,116	935
ECONOMISTS													
TOTAL....................	16,958	3,911	824	2,947	140	2 443	488	1,955	7,803	781	387	1,393	240
1 OR LESS YEARS.......	117	74	53	21	*	*	*	*	37	*	*	6	*
2-4 YEARS.............	890	366	135	229	2	1	*	1	430	46	6	41	*
5-9 YEARS.............	2,608	861	121	723	17	96	4	92	1,326	147	17	161	*
10-14 YEARS...........	2,868	524	56	458	10	574	195	379	1,227	151	26	366	*
15-19 YEARS...........	2,631	544	73	440	31	384	51	333	1,130	48	136	389	*
20-24 YEARS...........	1,177	240	13	183	44	256	72	184	475	87	9	105	5
25-29 YEARS...........	1,422	381	75	280	26	273	17	256	635	39	*	77	17
30-34 YEARS...........	956	101	*	91	10	227	62	165	456	61	56	38	17
35-39 YEARS...........	681	90	20	70	*	172	27	145	336	49	17	17	*
40 OR MORE YEARS......	319	50	16	34	*	53	*	53	155	24	17	20	*
NO REPORT.............	3,289	680	262	418	*	407	60	347	1,596	129	103	173	201
SOCIOLOGISTS/ANTHRO.													
TOTAL....................	12,056	1,823	1,056	760	7	1,228	67	1,161	7,565	141	243	730	326
1 OR LESS YEARS.......	134	76	48	28	*	*	*	*	42	*	*	16	*
2-4 YEARS.............	899	177	87	88	2	25	*	25	575	39	22	57	4
5-9 YEARS.............	1,858	511	277	232	2	60	16	44	1,040	30	56	128	33
10-14 YEARS...........	2,609	398	173	225	*	400	26	374	1,528	12	40	169	62
15-19 YEARS...........	1,646	174	118	53	3	272	*	272	1,094	5	*	95	6
20-24 YEARS...........	1,257	61	58	3	*	117	8	109	879	26	92	58	24
25-29 YEARS...........	764	109	93	16	*	77	*	77	575	3	*	*	*
30-34 YEARS...........	556	22	22	*	*	85	*	85	402	26	4	17	*
35-39 YEARS...........	209	25	20	5	*	17	17	*	163	*	*	*	4
40 OR MORE YEARS......	140	28	28	*	*	9	*	9	74	*	25	4	*
NO REPORT.............	1,904	242	132	110	*	166	*	166	1,193	*	4	186	193

* NO CASES REPORTED

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TABLE B-11. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, YEARS OF PROFESSIONAL
CONTINUED EXPERIENCE, AND PRIMARY WORK ACTIVITY: 1983

FIELD AND YEARS OF PROFESSIONAL EXPERIENCE	TOTAL EMPL	RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN			TEACHING	CONSULTING	SALES/ PROF. SERVICES	OTHER	NO REPORT
		TOTAL	BASIC RESEARCH	APPL'D RESEARCH	DEVELOPMENT	TOTAL	OF R&D	OF OTHER					
OTHER SOCIAL SCIENTISTS													
TOTAL	30,318	3,684	1,312	2,045	327	5,549	995	4,554	15,726	612	708	3,184	855
1 OR LESS YEARS	205	104	67	37	*	2	*	2	71	*	*	28	*
2-4 YEARS	1,605	345	179	145	21	202	73	129	741	9	4	199	105
5-9 YEARS	4,971	1,089	415	627	47	493	86	407	2,451	45	198	671	24
10-14 YEARS	5,534	665	229	342	94	1,306	394	912	2,630	124	63	677	69
15-19 YEARS	4,410	456	151	238	67	971	210	761	2,546	92	114	186	45
20-24 YEARS	2,851	228	55	113	60	572	51	521	1,655	*	91	274	31
25-29 YEARS	2,375	87	17	70	*	670	75	595	1,359	45	24	167	23
30-34 YEARS	1,525	111	58	49	4	250	28	222	981	69	*	97	17
35-39 YEARS	686	60	21	39	*	271	17	254	282	26	24	23	*
40 OR MORE YEARS	598	149	83	66	*	72	*	72	209	63	*	105	*
NO REPORT	5,558	390	37	319	34	740	61	679	2,801	139	190	757	541
ENGINEERS													
TOTAL	61,545	24,746	3,099	11,884	9,763	15,492	10,537	4,955	11,833	3,747	1,252	3,728	747
1 OR LESS YEARS	688	609	90	389	130	*	*	*	18	*	7	54	*
2-4 YEARS	4,323	2,597	295	1,278	1,024	295	283	12	904	122	73	371	11
5-9 YEARS	8,000	4,621	675	2,196	1,750	1,191	1,007	184	1,460	400	32	296	*
10-14 YEARS	9,973	4,404	604	2,276	1,524	2,639	2,217	422	1,486	559	239	597	49
15-19 YEARS	9,776	3,251	370	1,523	1,358	3,144	2,196	948	1,899	686	60	648	88
20-24 YEARS	7,412	2,279	224	1,006	1,049	2,356	1,295	1,061	1,593	411	227	503	43
25-29 YEARS	4,826	1,338	103	541	694	1,771	1,120	651	1,043	199	210	265	*
30-34 YEARS	4,180	1,247	131	605	511	1,378	787	591	825	379	67	238	14
35-39 YEARS	1,627	406	81	144	181	464	238	226	347	139	14	257	*
40 OR MORE YEARS	1,312	359	14	120	225	316	180	136	307	193	19	85	33
NO REPORT	9,468	3,635	512	1,806	1,317	1,938	1,214	724	1,951	659	354	422	509
AERO/ASTRO ENGINEERS													
TOTAL	3,684	1,800	273	721	806	954	798	156	517	138	79	196	*
1 OR LESS YEARS	27	27	*	*	27	*	*	*	*	*	*	*	*
2-4 YEARS	205	174	8	51	115	*	*	*	27	*	*	4	*
5-9 YEARS	293	218	10	125	83	10	10	*	38	22	*	5	*
10-14 YEARS	571	218	*	151	67	209	208	1	87	*	*	57	*
15-19 YEARS	703	391	126	207	58	191	167	24	95	*	*	28	*
20-24 YEARS	401	127	*	11	116	208	163	45	66	*	*	*	*
25-29 YEARS	353	90	*	46	44	126	111	15	15	66	33	23	*
30-34 YEARS	138	36	22	*	14	52	11	41	36	14	*	*	*
35-39 YEARS	117	31	8	*	23	16	16	*	23	14	*	33	*
40 OR MORE YEARS	63	15	*	*	15	40	21	19	*	8	*	*	*
NO REPORT	813	473	99	130	244	102	91	11	130	14	46	48	*
CHEMICAL ENGINEERS													
TOTAL	6,992	2,968	374	1,680	914	1,697	1,110	587	1,078	227	185	775	62
1 OR LESS YEARS	191	191	84	105	2	*	*	*	*	*	*	*	*
2-4 YEARS	867	494	68	420	6	35	35	*	275	2	*	61	*
5-9 YEARS	1,033	639	71	316	252	172	166	6	140	16	*	66	*
10-14 YEARS	1,137	493	51	248	194	299	299	*	113	*	65	167	*
15-19 YEARS	784	73	*	73	*	295	229	66	168	*	15	169	44
20-24 YEARS	789	196	19	79	98	265	105	160	103	102	22	101	*
25-29 YEARS	543	302	*	141	161	165	66	99	*	15	3	58	*
30-34 YEARS	520	165	58	15	92	154	110	44	79	78	*	30	14
35-39 YEARS	124	65	*	15	50	30	15	15	*	14	*	15	*
40 OR MORE YEARS	108	79	*	59	20	15	*	15	*	*	*	14	*
NO REPORT	896	271	23	209	39	267	85	182	180	*	80	94	1
CIVIL ENGINEERS													
TOTAL	5,317	898	189	391	318	778	180	598	2,132	934	113	360	102
1 OR LESS YEARS	78	78	*	78	*	*	*	*	*	*	*	*	*
2-4 YEARS	236	53	*	31	22	2	*	2	62	55	*	64	*
5-9 YEARS	602	169	39	95	35	32	23	9	221	157	*	23	*
10-14 YEARS	789	165	91	50	24	27	22	5	232	246	50	42	27
15-19 YEARS	816	153	23	*	130	96	40	56	335	154	14	64	*
20-24 YEARS	768	80	*	34	46	171	10	161	315	133	49	20	*
25-29 YEARS	486	16	*	6	10	169	25	144	294	*	*	7	*
30-34 YEARS	463	15	*	15	*	180	44	136	235	33	*	*	*
35-39 YEARS	106	*	*	*	*	*	*	*	77	*	*	29	*
40 OR MORE YEARS	198	27	*	14	13	30	*	30	30	35	*	43	33
NO REPORT	775	142	36	68	38	71	16	55	331	121	*	68	42
ELEC./ELECTRON. ENGINEERS													
TOTAL	12,696	5,006	330	2,125	2,551	3,961	2,817	1,144	2,447	380	247	408	247
1 OR LESS YEARS	76	34	*	12	22	*	*	*	16	*	7	19	*
2-4 YEARS	604	506	23	120	363	53	53	*	43	*	*	2	*
5-9 YEARS	1,746	979	*	411	568	179	148	31	515	4	28	41	*
10-14 YEARS	1,992	845	73	527	245	678	606	72	340	46	22	39	22
15-19 YEARS	2,421	869	82	339	448	965	686	279	286	168	21	112	*
20-24 YEARS	1,528	438	*	209	229	601	433	168	367	*	*	79	43
25-29 YEARS	667	143	*	19	124	347	170	177	96	*	33	48	*
30-34 YEARS	1,004	364	33	148	183	299	219	80	233	79	15	14	*
35-39 YEARS	288	78	*	46	32	84	29	55	92	19	*	15	*
40 OR MORE YEARS	223	63	*	1	62	51	21	30	169	*	*	*	*
NO REPORT	2,147	687	119	293	275	704	452	252	350	64	121	39	182
MATERIALS SCI. ENGINEERS													
TOTAL	7,422	3,591	936	2,007	648	2,308	1,947	361	790	141	122	438	23
1 OR LESS YEARS	31	31	2	29	*	*	*	*	*	*	*	*	*
2-4 YEARS	692	506	164	267	75	95	95	*	29	*	23	39	*
5-9 YEARS	997	657	280	290	87	224	224	*	89	8	2	17	*
10-14 YEARS	1,299	559	151	268	140	527	462	65	84	3	3	123	*
15-19 YEARS	1,093	529	51	392	86	355	318	37	133	*	*	76	*
20-24 YEARS	829	354	165	154	35	286	168	118	122	*	35	32	*
25-29 YEARS	727	167	*	96	71	315	253	62	129	49	45	22	*
30-34 YEARS	523	235	*	180	55	157	128	29	51	*	14	66	*
35-39 YEARS	254	72	29	43	*	90	41	49	45	*	*	47	*
40 OR MORE YEARS	247	*	*	*	*	125	125	*	48	59	*	15	*
NO REPORT	730	481	94	288	99	134	133	1	69	22	*	1	23

* NO CASES REPORTED

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TABLE B-11. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, YEARS OF PROFESSIONAL
CONTINUED EXPERIENCE, AND PRIMARY WORK ACTIVITY: 1983

FIELD AND YEARS OF PROFESSIONAL EXPERIENCE	TOTAL EMPL	RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN							
		TOTAL	BASIC RE-SEARCH	APPL'D RE-SEARCH	DEVEL-OPMENT	TOTAL	OF R&D	OF OTHER	TEACH-ING	CON-SULT-ING	SALES/ PROF. SER-VICES	OTHER	NO REPORT
MECHANICAL ENGINEERS													
TOTAL..........	5,657	1,091	156	680	1,056	1,088	537	491	1,867	342	65	377	27
1 OR LESS YEARS.......	45	10	*	*	10	*	*	*	2	*	*	33	*
2-4 YEARS.............	267	62	2	2	58	8	*	8	138	*	*	59	*
5-9 YEARS.............	631	302	3	163	136	67	67	*	214	42	*	6	*
10-14 YEARS...........	1,205	636	39	329	268	258	178	80	154	25	22	110	*
15-19 YEARS...........	825	184	*	33	151	197	133	64	291	109	*	44	*
20-24 YEARS...........	788	199	33	33	133	184	45	139	335	47	*	23	*
25-29 YEARS...........	738	205	18	33	154	141	110	31	268	33	43	48	*
30-34 YEARS...........	312	84	3	34	47	129	63	66	60	*	*	39	*
35-39 YEARS...........	104	59	44	*	15	*	*	*	16	29	*	*	*
40 OR MORE YEARS......	137	60	14	13	33	14	*	14	63	*	*	*	*
NO REPORT.............	605	90	*	40	50	90	1	89	326	57	*	15	27
NUCLEAR ENGINEERS													
TOTAL.................	2,329	1,146	22	588	536	547	296	251	275	225	38	55	43
1 OR LESS YEARS.......	27	27	*	27	*	*	*	*	*	*	*	*	*
2-4 YEARS.............	99	65	*	2	63	2	2	*	32	*	*	*	*
5-9 YEARS.............	409	278	22	174	82	109	58	51	*	17	*	5	*
10-14 YEARS...........	489	248	*	158	90	54	10	44	40	121	24	2	*
15-19 YEARS...........	401	275	*	137	138	52	52	*	38	23	*	13	*
20-24 YEARS...........	229	*	*	*	*	118	46	73	89	*	*	22	*
25-29 YEARS...........	161	99	*	65	34	49	15	34	*	*	*	13	*
30-34 YEARS...........	126	63	*	*	63	50	35	15	13	*	*	*	*
35-39 YEARS...........	71	15	*	*	15	28	28	*	14	*	14	*	*
40 OR MORE YEARS......	87	48	*	*	48	13	13	*	13	13	*	*	*
NO REPORT.............	230	28	*	25	3	72	37	35	36	51	*	*	43
SYSTEMS DESIGN ENGINEERS													
TOTAL.................	3,691	1,825	38	421	1,366	830	699	131	585	288	79	268	16
1 OR LESS YEARS.......	30	30	*	16	14	*	*	*	*	*	*	*	*
2-4 YEARS.............	352	228	*	3	225	37	37	*	36	*	*	40	11
5-9 YEARS.............	534	290	23	72	195	140	140	*	29	45	*	30	*
10-14 YEARS...........	668	262	15	40	207	140	140	*	169	38	23	36	*
15-19 YEARS...........	777	225	*	52	173	275	173	102	169	80	*	28	*
20-24 YEARS...........	403	262	*	45	217	120	118	2	15	2	*	4	*
25-29 YEARS...........	157	102	*	33	69	21	21	*	16	*	18	*	*
30-34 YEARS...........	238	59	*	15	44	29	15	14	46	33	38	33	*
35-39 YEARS...........	67	13	*	*	13	26	13	13	*	*	*	28	*
40 OR MORE YEARS......	42	14	*	*	14	*	*	*	*	28	*	*	*
NO REPORT.............	623	340	*	145	195	42	42	*	105	62	*	69	5
OTHER ENGINEERS													
TOTAL.................	13,557	5,621	781	3,271	1,569	3,329	2,093	1,236	2,133	1,072	324	851	227
1 OR LESS YEARS.......	183	181	4	122	55	*	*	*	*	*	*	2	*
2-4 YEARS.............	1,001	509	30	382	97	63	61	2	262	65	*	102	*
5-9 YEARS.............	1,755	1,089	227	550	312	258	171	87	214	89	2	103	*
10-14 YEARS...........	1,823	978	184	505	289	447	292	155	267	80	30	21	*
15-19 YEARS...........	1,956	552	88	290	174	718	398	320	364	152	10	116	44
20-24 YEARS...........	1,677	623	7	441	175	403	207	196	181	127	121	222	*
25-29 YEARS...........	994	214	85	102	27	438	349	89	225	36	35	46	*
30-34 YEARS...........	816	226	15	198	13	328	162	166	72	142	*	48	*
35-39 YEARS...........	496	73	*	40	33	190	96	94	80	63	*	90	*
40 OR MORE YEARS......	207	53	*	33	20	28	*	28	44	50	19	13	*
NO REPORT.............	2,649	1,123	141	608	374	456	357	99	424	268	107	88	183

* NO CASES REPORTED

SOURCE: NATIONAL SCIENCE FOUNDATION

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TABLE B-12. MEDIAN ANNUAL SALARIES OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, SEX, AND RACIAL/ETHNIC GROUP: 1983

FIELD	TOTAL	.......SEX....... MEN	WOMEN	....................RACE.................... WHITE	BLACK	AMERICAN INDIAN	ASIAN	OTHER	HISPANIC ETHNICITY
TOTAL....................	$40,100	$40,800	$31,700	$40,200	$37,000	$36,200	$40,100	$31,800	$37,200
SCIENTISTS................	38,200	39,700	31,500	[illegible]	36,200	36,000	36,700	31,600	36,900
PHYSICAL SCIENTISTS......	42,300	42,800	35,200	42,700	40,100	**	40,400	**	42,400
CHEMISTS................	41,900	42,600	34,700	42,400	38,300	**	40,000	**	41,100
PHYSICISTS/ASTRONOMERS..	42,900	43,200	37,400	43,000	50,100	**	42,000	**	45,000
MATHEMATICAL SCIENTISTS..	36,600	36,900	32,200	36,600	36,600	**	36,400	**	41,800
MATHEMATICIANS..........	36,400	36,700	31,600	36,400	36,800	**	37,200	**	41,900
STATISTICIANS...........	37,400	37,900	34,400	38,000	**	**	33,000	**	**
COMPUTER/INFORMATION SPEC	40,400	40,900	33,400	40,400	**	**	40,300	**	36,200
ENVIRONMENTAL SCIENTISTS.	40,900	41,300	35,300	40,800	**	**	43,800	**	40,300
EARTH SCIENTISTS........	41,500	41,900	36,300	41,000	**	**	45,200	**	40,600
OCEANOGRAPHERS..........	36,700	37,500	31,600	36,700	**	**	**	**	**
ATMOSPHERIC SCIENTISTS..	41,600	42,000	34,000	42,000	**	**	**	**	**
LIFE SCIENTISTS..........	37,300	39,000	31,200	37,600	36,300	**	35,200	**	34,600
BIOLOGICAL SCIENTISTS...	36,200	37,100	30,800	36,400	34,600	**	34,700	**	34,900
AGRICULTURAL SCIENTISTS.	37,900	38,200	29,100	38,200	**	**	33,700	**	28,400
MEDICAL SCIENTISTS......	41,200	45,000	32,700	41,700	39,500	**	37,000	**	42,200
PSYCHOLOGISTS............	35,800	37,100	30,800	35,900	33,200	**	32,900	**	36,000
SOCIAL SCIENTISTS........	36,000	36,700	30,700	36,100	36,700	**	33,500	**	35,500
ECONOMISTS..............	41,400	42,200	34,600	41,700	39,500	**	38,000	**	40,400
SOCIOLOGISTS/ANTHRO.....	32,100	33,400	29,800	32,500	29,600	**	29,800	**	33,900
OTHER SOCIAL SCIENTISTS.	35,000	35,700	30,800	35,100	38,900	**	31,300	**	34,900
ENGINEERS.................	46,600	46,800	39,200	47,700	42,500	**	44,900	**	39,500
AERO/ASTRO ENGINEERS.....	47,500	47,800	41,800	48,800	**	**	37,800	**	**
CHEMICAL ENGINEERS.......	50,600	50,700	40,100	52,900	**	**	42,700	**	**
CIVIL ENGINEERS..........	42,500	42,600	29,300	42,200	**	**	45,200	**	**
ELEC./ELECTRON. ENGINEERS	48,600	48,700	40,000	49,800	**	**	46,500	**	**
MATERIALS SCI. ENGINEERS.	47,400	47,600	39,700	48,300	**	**	45,100	**	**
MECHANICAL ENGINEERS.....	45,500	45,600	36,200	46,100	**	**	43,400	**	**
NUCLEAR ENGINEERS........	46,200	46,200	**	46,800	**	**	**	**	**
SYSTEMS DESIGN ENGINEERS.	48,400	48,600	41,600	48,900	**	**	43,400	**	**
OTHER ENGINEERS..........	45,300	45,400	35,500	45,400	**	**	45,100	**	**

** NO MEDIAN COMPUTED FOR GROUPS WITH FEWER THAN 20 INDIVIDUALS REPORTING SALARY

NOTE: MEDIAN SALARIES COMPUTED ONLY FOR FULL-TIME EMPLOYED CIVILIANS. HISPANICS INCLUDE ALL RACES.

SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE B-13. MEDIAN ANNUAL SALARIES OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD AND AGE: 1983

		AGE										
FIELD	TOTAL	UNDER 30	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70 OR OVER	NO REPORT
TOTAL....................	$40,100	$30,300	$31,600	$35,900	$40,400	$44,200	$44,700	$46,200	$48,500	$47,000	$50,900	**
SCIENTISTS................	38,200	28,500	30,300	33,900	38,400	42,100	43,100	45,000	46,600	46,900	46,700	**
PHYSICAL SCIENTISTS......	42,300	33,800	35,300	38,600	42,100	45,700	46,300	50,700	50,300	55,300	**	**
CHEMISTS................	41,900	33,600	35,400	38,800	41,800	45,700	46,300	52,000	50,200	55,800	**	**
PHYSICISTS/ASTRONOMERS..	42,900	35,300	34,700	38,300	42,600	45,800	46,300	49,100	51,100	53,200	**	**
MATHEMATICAL SCIENTISTS..	36,600	26,000	27,700	33,400	36,600	39,300	42,400	44,700	44,800	45,800	**	**
MATHEMATICIANS..........	36,400	25,600	27,800	33,100	36,300	38,400	41,500	44,400	44,400	45,600	**	**
STATISTICIANS...........	37,400	**	27,500	33,700	40,900	45,100	45,000	**	**	**	**	**
COMPUTER/INFORMATION SPEC	40,400	**	3[illegible],100	38,400	40,100	42,100	44,500	60,100	42,900	**	**	**
ENVIRONMENTAL SCIENTISTS.	40,900	**	32,000	36,900	42,000	44,700	52,000	46,800	51,700	47,700	**	**
EARTH SCIENTISTS........	41,500	**	35,100	38,600	41,400	44,300	51,900	48,800	51,800	54,700	**	**
OCEANOGRAPHERS..........	36,700	**	26,900	32,100	37,500	44,700	**	**	**	**	**	**
ATMOSPHERIC SCIENTISTS..	41,600	**	30,000	34,600	48,400	49,600	**	**	**	**	**	**
LIFE SCIENTISTS..........	37,300	27,200	29,000	32,500	36,900	41,300	42,700	45,100	47,000	46,300	53,200	**
BIOLOGICAL SCIENTISTS...	36,200	26,100	28,600	31,000	36,100	40,900	41,200	44,700	44,200	46,300	**	**
AGRICULTURAL SCIENTISTS.	37,900	**	29,200	33,000	36,700	40,100	42,700	43,600	45,400	42,500	**	**
MEDICAL SCIENTISTS......	41,200	**	30,200	36,300	41,700	45,900	46,700	49,900	52,400	56,500	**	**
PSYCHOLOGISTS............	35,800	25,100	28,100	31,600	36,800	39,500	40,800	43,300	44,000	44,300	**	**
SOCIAL SCIENTISTS........	36,000	**	27,500	30,800	36,000	39,400	39,600	41,700	46,000	45,300	**	**
ECONOMISTS..............	41,400	**	33,000	36,000	43,200	47,200	44,500	44,300	51,800	46,300	**	**
SOCIOLOGISTS/ANTHRO.....	32,100	**	23,700	29,300	32,700	33,600	37,100	37,400	40,400	48,800	**	**
OTHER SOCIAL SCIENTISTS.	35,000	**	25,800	30,400	35,200	39,400	38,100	41,300	45,500	39,400	**	**
ENGINEERS................	46,600	37,200	38,100	43,500	48,400	50,800	50,300	51,700	56,100	48,100	**	**
AERO/ASTRO ENGINEERS.....	47,500	**	**	44,200	48,100	51,900	**	**	**	**	**	**
CHEMICAL ENGINEERS.......	50,600	**	39,200	45,800	55,800	57,200	59,000	62,200	**	**	**	**
CIVIL ENGINEERS..........	42,500	**	**	40,700	42,300	42,600	44,500	**	**	**	**	**
ELEC./ELECTRON. ENGINEERS	48,600	**	42,100	43,000	51,500	55,100	58,700	52,600	56,200	**	**	**
MATERIALS SCI. ENGINEERS.	47,400	**	37,300	44,800	50,500	50,400	48,300	52,400	56,600	**	**	**
MECHANICAL ENGINEERS.....	45,500	**	34,500	42,900	47,500	50,400	44,400	**	**	**	**	**
NUCLEAR ENGINEERS........	46,200	**	**	43,300	46,900	**	**	**	**	**	**	**
SYSTEMS DESIGN ENGINEERS.	48,400	**	41,600	43,300	49,500	52,900	**	**	**	**	**	**
OTHER ENGINEERS..........	45,300	**	37,100	40,500	45,600	47,100	51,100	52,100	58,000	**	**	**

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SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE B-14. MEDIAN ANNUAL SALARIES OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD AND PRIMARY WORK ACTIVITY: 1983

		RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN						
FIELD	TOTAL	TOTAL	BASIC RE-SEARCH	APPLIED RE-SEARCH	DEVEL-OPMENT	TOTAL	OF R&D	OF OTHER	TEACH-ING	CON-SULT-ING	SALES/ PROF. SER-VICES	OTHER	NO REPORT
TOTAL..................	$40,100	$40,500	$37,900	$41,300	$43,100	$50,600	$53,800	$45,000	$34,800	$46,500	$38,000	$40,500	$37,600
SCIENTISTS...............	38,200	39,100	37,400	40,300	40,400	48,800	52,700	43,700	34,000	45,200	37,300	39,700	36,600
PHYSICAL SCIENTISTS......	42,300	41,700	40,500	42,500	43,400	52,700	53,600	49,500	35,200	55,900	44,600	44,400	**
CHEMISTS...............	41,900	41,100	40,100	42,000	42,800	52,000	53,100	45,800	34,200	**	45,500	43,700	**
PHYSICISTS/ASTRONOMERS..	42,900	42,400	40,800	43,700	45,200	53,900	55,400	52,600	36,700	**	42,200	45,600	**
MATHEMATICAL SCIENTISTS..	36,600	39,800	36,900	42,400	38,200	46,100	50,500	44,100	34,000	42,300	37,800	31,000	**
MATHEMATICIANS..........	36,400	39,100	36,800	43,100	38,900	44,500	54,800	43,500	33,900	**	**	37,000	**
STATISTICIANS...........	37,400	41,300	**	41,600	**	50,000	**	**	35,300	41,900	**	**	**
COMPUTER/INFORMATION SPEC	40,400	40,600	41,300	43,600	38,900	51,400	53,100	49,800	36,300	45,700	40,200	31,400	**
ENVIRONMENTAL SCIENTISTS.	40,900	40,600	39,800	41,800	35,800	51,800	52,700	48,300	35,900	46,300	37,800	40,000	**
EARTH SCIENTISTS........	41,500	42,600	41,300	44,100	35,900	51,500	53,800	47,300	35,800	45,300	42,400	39,900	**
OCEANOGRAPHERS..........	36,700	32,800	32,900	30,500	**	47,900	45,900	**	31,300	**	**	**	**
ATMOSPHERIC SCIENTISTS..	41,600	37,300	40,100	36,900	**	56,200	56,200	**	36,800	**	**	**	**
LIFE SCIENTISTS..........	37,300	36,600	36,200	37,100	37,500	49,800	52,200	46,000	34,200	40,600	42,600	36,800	36,200
BIOLOGICAL SCIENTISTS...	36,200	36,200	35,900	37,400	36,300	50,100	50,800	46,900	33,200	41,100	39,500	36,600	**
AGRICULTURAL SCIENTISTS.	37,900	36,800	39,500	36,400	36,500	48,700	49,400	48,100	35,500	37,800	36,300	32,700	**
MEDICAL SCIENTISTS......	41,200	39,300	37,900	40,300	40,500	49,600	56,800	44,700	36,600	43,700	50,400	41,700	**
PSYCHOLOGISTS............	35,800	36,900	35,600	37,600	**	40,400	49,800	39,700	33,100	40,100	35,700	33,000	**
SOCIAL SCIENTISTS........	36,000	37,100	35,300	38,800	46,800	43,300	50,900	41,600	33,300	50,000	40,600	40,300	42,400
ECONOMISTS..............	41,400	42,200	36,600	42,900	**	54,500	59,000	52,300	36,300	50,600	46,600	61,000	**
SOCIOLOGISTS/ANTHRO.....	32,100	32,600	34,600	30,700	**	37,900	**	37,800	30,700	**	**	36,300	**
OTHER SOCIAL SCIENTISTS.	35,000	36,100	35,500	37,300	**	41,300	48,200	40,100	32,700	42,700	35,800	35,000	**
ENGINEERS................	46,600	45,100	42,000	45,100	45,400	55,600	56,100	53,700	40,300	48,900	50,000	47,900	**
AERO/ASTRO ENGINEERS.....	47,500	44,300	**	44,000	43,800	51,200	51,200	**	**	**	**	**	**
CHEMICAL ENGINEERS.......	50,600	43,700	**	43,500	50,100	60,200	56,600	75,800	40,300	**	**	54,700	**
CIVIL ENGINEERS..........	42,500	40,900	**	**	**	50,700	**	57,100	40,100	49,000	**	35,400	**
ELEC./ELECTRON. ENGINEERS	48,600	45,800	**	48,800	44,700	60,200	60,800	58,100	39,500	**	**	**	**
MATERIALS SCI. ENGINEERS.	47,400	45,100	44,000	45,200	46,900	53,000	52,700	**	44,300	**	**	**	**
MECHANICAL ENGINEERS.....	45,500	47,100	**	44,700	47,300	52,500	50,700	**	41,200	**	**	**	**
NUCLEAR ENGINEERS........	46,200	46,000	**	46,200	45,600	50,700	**	**	**	**	**	**	**
SYSTEMS DESIGN ENGINEERS.	48,400	45,500	**	44,000	47,200	51,500	51,800	**	43,700	**	**	**	**
OTHER ENGINEERS..........	45,300	42,900	40,300	42,800	45,200	54,300	58,700	48,100	37,500	40,200	**	48,000	**

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SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE B-15. MEDIAN ANNUAL SALARIES OF DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD AND TYPE OF EMPLOYER: 1983

FIELD	TOTAL EMPL	BUSINESS/INDUSTRY	EDUCATIONAL INSTITUTIONS TOTAL	EDUCATIONAL INSTITUTIONS 4-YEAR COLL/UNIV	EDUCATIONAL INSTITUTIONS 2-YEAR COLL	ELEM/SEC. SCHOOL	HOSPITAL/CLINIC	NON-PROFIT ORGS	FEDERAL GOV'T	MILITARY/COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NO REPORT
TOTAL	$40,100	$47,000	$36,200	$36,300	$32,000	$31,300	$34,700	$39,800	$44,700	**	$34,000	$33,700	$65,700	**
SCIENTISTS	38,200	45,500	35,500	35,700	32,200	31,300	34,700	36,500	44,300	**	33,500	32,900	65,400	**
PHYSICAL SCIENTISTS	42,300	45,900	37,200	37,700	32,400	25,300	42,500	40,500	44,300	**	30,000	**	**	**
CHEMISTS	41,900	45,600	35,600	35,900	32,700	26,600	40,600	40,700	42,900	**	26,600	**	**	**
PHYSICISTS/ASTRONOMERS	42,900	48,300	40,100	40,300	**	**	**	40,500	45,700	**	**	**	**	**
MATHEMATICAL SCIENTISTS	36,600	42,700	35,600	35,800	31,300	**	**	42,100	45,500	**	**	**	**	**
MATHEMATICIANS	36,400	43,600	35,400	35,700	31,300	**	**	**	44,600	**	**	**	**	**
STATISTICIANS	37,400	40,000	36,300	36,300	**	**	**	**	46,700	**	**	**	**	**
COMPUTER/INFORMATION SPEC	40,400	42,700	37,000	37,400	**	**	**	43,800	45,900	**	**	**	**	**
ENVIRONMENTAL SCIENTISTS	40,900	48,500	36,200	36,400	**	**	**	43,500	45,900	**	30,400	**	**	**
EARTH SCIENTISTS	41,500	49,200	36,600	36,800	**	**	**	48,200	46,100	**	29,900	**	**	**
OCEANOGRAPHERS	36,700	**	31,700	31,800	**	**	**	**	41,500	**	**	**	**	**
ATMOSPHERIC SCIENTISTS	41,600	48,600	34,700	34,700	**	**	**	**	48,000	**	**	**	**	**
LIFE SCIENTISTS	37,300	43,700	35,700	35,700	34,600	25,300	37,300	36,600	42,700	**	36,100	32,800	**	**
BIOLOGICAL SCIENTISTS	36,200	41,800	34,800	34,800	33,400	**	37,400	35,700	42,000	**	33,700	**	**	**
AGRICULTURAL SCIENTISTS	37,900	40,100	35,900	35,800	**	**	**	38,600	43,400	**	33,000	**	**	**
MEDICAL SCIENTISTS	41,200	50,700	38,900	39,100	**	**	37,200	40,300	49,000	**	39,000	39,700	**	**
PSYCHOLOGISTS	35,800	48,000	33,600	33,600	33,200	34,600	32,700	29,800	43,800	**	35,400	28,100	**	**
SOCIAL SCIENTISTS	36,000	45,400	34,400	34,600	30,800	**	**	36,000	45,600	**	32,000	37,700	65,300	**
ECONOMISTS	41,400	52,100	37,600	37,500	**	**	**	**	48,900	**	**	**	66,300	**
SOCIOLOGISTS/ANTHRO	32,100	36,300	31,800	32,900	**	**	**	**	**	**	**	**	**	**
OTHER SOCIAL SCIENTISTS	35,000	35,600	33,800	33,900	31,000	**	**	37,300	44,700	**	31,900	37,500	**	**
ENGINEERS	46,600	49,900	42,500	42,500	**	**	**	48,100	46,500	**	**	**	**	**
AERO/ASTRO ENGINEERS	47,500	47,700	44,600	44,600	**	**	**	**	49,300	**	**	**	**	**
CHEMICAL ENGINEERS	50,600	52,400	41,700	41,700	**	**	**	**	**	**	**	**	**	**
CIVIL ENGINEERS	42,500	47,600	40,800	40,800	**	**	**	**	**	**	**	**	**	**
ELEC./ELECTRON. ENGINEERS	48,600	51,200	43,300	43,300	**	**	**	**	45,500	**	**	**	**	**
MATERIALS SCI. ENGINEERS	47,400	49,100	44,600	44,600	**	**	**	**	46,300	**	**	**	**	**
MECHANICAL ENGINEERS	45,500	48,100	43,100	43,300	**	**	**	**	**	**	**	**	**	**
NUCLEAR ENGINEERS	46,200	46,200	46,100	46,100	**	**	**	**	**	**	**	**	**	**
SYSTEMS DESIGN ENGINEERS	48,400	49,000	44,200	44,200	**	**	**	**	**	**	**	**	**	**
OTHER ENGINEERS	45,300	48,400	41,000	41,100	**	**	**	42,000	45,000	**	**	**	**	**

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SOURCE: NATIONAL SCIENCE FOUNDATION

BEST COPY AVAILABLE

TABLE B-16. MEDIAN ANNUAL SALARIES OF DOCTORAL SCIENTISTS AND ENGINEERS
BY FIELD AND YEARS OF PROFESSIONAL EXPERIENCE: 1983

FIELD	TOTAL	YEARS OF PROFESSIONAL EXPERIENCE 1 OR LESS YEARS	2-4 YEARS	5-9 YEARS	10-14 YEARS	15-19 YEARS	20-24 YEARS	25-29 YEARS	30-34 YEARS	35-39 YEARS	40 OR MORE YEARS	NO REPORT
TOTAL....................	$40,100	$29,500	$30,300	$33,100	$39,000	$42,800	$44,800	$46,700	$50,000	$50,600	$53,900	$40,500
SCIENTISTS................	38,200	27,700	28,400	31,500	36,900	40,800	43,100	45,500	48,900	50,200	52,000	38,900
PHYSICAL SCIENTISTS......	42,300	33,400	34,000	36,400	40,500	45,100	45,800	49,600	51,700	52,500	59,200	44,300
CHEMISTS................	41,900	33,300	34,400	36,800	40,400	44,700	45,600	[illegible]	51,200	52,700	60,100	44,100
PHYSICISTS/ASTRONOMERS..	42,900	**	31,800	35,700	40,700	45,300	46,400	[illegible]	52,200	51,900	57,100	44,500
MATHEMATICAL SCIENTISTS..	36,600	**	26,400	30,500	35,300	39,100	40,800	42,800	46,200	46,600	**	37,300
MATHEMATICIANS..........	36,400	**	26,300	29,900	35,000	38,000	39,400	42,900	45,900	46,500	**	36,800
STATISTICIANS...........	37,400	**	26,800	32,000	35,700	44,700	45,700	**	**	**	**	49,800
COMPUTER/INFORMATION SPEC	40,400	**	35,400	34,900	40,900	42,700	47,500	50,900	50,200	**	**	42,500
ENVIRONMENTAL SCIENTISTS.	40,900	**	29,800	34,800	39,400	45,200	49,800	51,500	51,100	58,200	57,000	40,000
EARTH SCIENTISTS........	41,500	**	35,200	35,600	39,400	44,900	50,000	50,200	55,200	58,400	50,800	40,500
OCEANOGRAPHERS..........	36,700	**	**	30,800	37,300	44,500	**	**	**	**	**	33,600
ATMOSPHERIC SCIENTISTS..	41,600	**	**	35,100	41,200	48,500	**	**	**	**	**	**
LIFE SCIENTISTS..........	37,300	25,600	27,500	31,000	36,500	40,400	43,400	45,500	48,400	50,200	50,900	39,400
BIOLOGICAL SCIENTISTS...	36,200	25,900	26,100	30,300	36,000	39,300	41,600	45,400	45,800	50,000	51,700	36,300
AGRICULTURAL SCIENTISTS.	37,900	**	28,200	31,800	35,800	42,000	40,900	43,800	47,000	46,900	**	37,900
MEDICAL SCIENTISTS......	41,200	22,900	30,400	35,200	39,800	44,900	46,600	48,300	55,100	52,400	54,500	45,400
PSYCHOLOGISTS............	35,800	**	26,100	30,600	35,700	39,200	42,100	44,700	45,300	44,700	45,800	35,800
SOCIAL SCIENTISTS........	36,000	**	25,500	28,800	35,300	38,100	40,200	42,700	47,700	48,800	46,300	35,900
ECONOMISTS..............	41,400	**	29,700	33,600	42,200	46,600	46,500	45,000	52,900	46,600	**	40,400
SOCIOLOGISTS/ANTHRO.....	32,100	**	23,600	26,700	32,600	32,500	40,200	41,000	38,600	**	**	33,200
OTHER SOCIAL SCIENTISTS.	35,000	**	24,300	27,200	33,300	36,900	36,800	41,000	46,500	50,600	46,100	33,700
ENGINEERS................	46,600	37,400	36,700	40,700	45,700	50,100	49,900	51,600	53,500	53,700	60,300	48,300
AERO/ASTRO ENGINEERS.....	47,500	**	**	40,300	45,700	48,200	**	**	**	**	**	48,300
CHEMICAL ENGINEERS.......	50,600	**	36,500	43,800	47,900	56,700	60,100	66,600	54,000	**	**	56,000
CIVIL ENGINEERS..........	42,500	**	**	39,900	45,000	41,000	44,200	**	**	**	**	**
ELEC./ELECTRON. ENGINEERS	48,600	**	41,200	40,600	50,100	50,600	53,900	50,600	55,600	**	**	50,900
MATERIALS SCI. ENGINEERS.	47,400	**	37,300	40,100	46,800	50,300	49,600	50,600	56,000	**	**	42,000
MECHANICAL ENGINEERS.....	45,500	**	**	40,000	44,900	50,100	46,200	51,000	**	**	**	**
NUCLEAR ENGINEERS........	46,200	**	**	**	45,800	**	**	**	**	**	**	**
SYSTEMS DESIGN ENGINEERS.	48,400	**	40,300	39,900	47,600	51,500	**	**	**	**	**	49,900
OTHER ENGINEERS..........	45,300	**	35,600	40,300	42,900	50,000	47,900	53,100	53,900	60,600	**	45,800

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SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE B-17. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY GEOGRAPHIC DIVISION, STATE, AND FIELD: 1983

GEOGRAPHIC DIVISION AND STATE	TOTAL	TOTAL SCIEN-TISTS	PHYSICAL SCIENTISTS			...MATH. SCIENTISTS....			COMP/ INFRM. SPEC.	ENVIRONMENTAL SCIENTISTS			
			TOTAL	CHEM-ISTS	PHYSI-CISTS/ ASTRON.	TOTAL	MATH.	STAT.		TOTAL	EARTH SCI.	OCEAN.	ATMOS. SCI.
TOTAL	395,033	331,247	69,579	45,569	24,010	17,357	14,470	2,887	12,304	17,141	13,077	1,798	2,266
NEW ENGLAND	30,250	25,965	5,833	3,461	2,372	1,474	1,205	269	1,172	1,276	792	302	182
CONNECTICUT	7,186	6,380	1,781	1,106	675	236	223	13	218	213	99	49	65
MAINE	1,414	1,143	223	132	91	60	57	3	31	108	68	40	*
MASSACHUSETTS	16,961	14,496	3,184	1,781	1,403	911	758	153	815	690	498	88	104
NEW HAMPSHIRE	1,227	937	119	70	49	37	37	*	31	78	8	70	*
RHODE ISLAND	2,140	1,763	329	241	88	164	90	74	77	107	52	55	*
VERMONT	1,322	1,246	197	131	66	66	40	26	*	80	67	*	13
MIDDLE ATLANTIC	73,783	61,263	15,630	11,419	4,211	3,144	2,710	434	2,237	1,569	1,211	184	174
NEW JERSEY	16,994	12,631	5,151	3,980	1,171	643	561	82	591	247	174	65	8
NEW YORK	37,739	32,874	6,655	4,427	2,228	1,769	1,524	245	1,137	830	615	110	105
PENNSYLVANIA	19,050	15,758	3,824	3,012	812	732	625	107	509	492	422	9	61
EAST NORTH CENTRAL	59,224	50,223	11,426	8,411	3,015	2,745	2,303	442	2,131	1,550	1,316	36	198
ILLINOIS	17,647	15,021	3,071	2,127	944	623	561	62	946	435	394	7	34
INDIANA	7,270	6,323	1,270	927	343	455	360	95	73	161	133	9	19
MICHIGAN	12,139	10,315	2,425	1,734	691	512	435	77	425	259	226	7	26
OHIO	15,714	12,784	3,609	2,859	750	748	636	112	536	467	393	1	73
WISCONSIN	6,454	5,780	1,051	764	287	407	311	96	151	228	170	12	46
WEST NORTH CENTRAL	24,587	21,840	3,425	2,362	1,063	1,381	1,111	270	660	631	446	*	185
IOWA	3,779	3,476	421	212	209	342	234	108	64	96	82	*	14
KANSAS	2,753	2,434	187	84	103	126	95	31	60	92	85	*	7
MINNESOTA	6,985	6,320	1,172	860	312	319	310	9	272	100	91	*	9
MISSOURI	6,675	5,640	1,058	735	323	391	325	66	140	164	121	*	43
NORTH DAKOTA	987	895	133	131	2	53	38	15	16	5	5	*	*
NEBRASKA	2,501	2,273	314	260	54	134	93	41	48	159	47	*	112
SOUTH DAKOTA	907	802	140	80	60	16	16	*	60	15	15	*	*
SOUTH ATLANTIC	70,583	60,833	12,445	7,822	4,623	3,295	2,626	669	1,738	3,009	2,048	486	475
DELAWARE	3,549	2,765	1,809	1,714	95	38	38	*	34	55	40	9	6
DISTRICT OF COLUMBIA	11,592	10,303	1,505	542	963	549	386	163	204	603	411	63	129
FLORIDA	9,258	7,901	1,305	912	393	311	266	45	147	479	292	134	53
GEORGIA	5,757	5,093	797	485	312	270	227	43	224	129	91	20	18
MARYLAND	14,552	12,894	2,339	1,040	1,299	656	469	187	329	686	435	98	153
NORTH CAROLINA	8,756	7,784	1,495	1,182	313	478	378	100	157	238	110	55	73
SOUTH CAROLINA	3,456	3,012	798	539	259	238	191	47	83	117	68	40	9
VIRGINIA	12,018	9,575	1,874	997	877	729	654	75	555	675	574	67	34
WEST VIRGINIA	1,645	1,506	523	411	112	26	17	9	5	27	27	*	*
EAST SOUTH CENTRAL	16,312	13,979	2,747	1,889	858	985	812	173	273	432	382	33	17
ALABAMA	3,856	3,077	452	199	253	224	189	35	53	61	45	15	1
KENTUCKY	3,411	3,198	630	529	101	322	265	57	57	100	87	*	13
MISSISSIPPI	2,495	2,181	148	92	56	73	70	3	4	143	124	18	1
TENNESSEE	6,550	5,523	1,517	1,069	448	366	288	78	159	128	126	*	2
WEST SOUTH CENTRAL	31,009	25,240	4,477	3,607	870	1,140	983	157	923	2,652	2,382	131	139
ARKANSAS	1,488	1,383	238	216	22	39	24	15	20	29	29	*	*
LOUISIANA	4,930	4,092	831	739	92	279	253	26	67	249	192	43	14
OKLAHOMA	4,205	3,351	393	361	32	148	131	17	25	433	405	1	27
TEXAS	20,386	16,414	3,015	2,291	724	674	575	99	811	1,941	1,756	87	98
MOUNTAIN	24,888	20,029	3,708	1,306	2,402	1,057	810	247	635	2,630	2,143	17	470
ARIZONA	4,182	3,359	382	136	246	100	83	17	78	354	294	*	60
COLORADO	8,011	6,495	773	354	419	266	237	29	289	1,481	1,130	17	334
IDAHO	1,534	1,235	156	91	65	60	32	28	2	124	124	*	*
MONTANA	1,354	1,289	50	14	36	80	41	39	57	78	69	*	9
NEW MEXICO	4,808	3,548	1,683	306	1,377	286	206	80	82	213	182	*	31
NEVADA	787	733	60	14	46	85	70	15	28	106	93	*	13
UTAH	3,467	2,690	461	271	190	141	102	39	95	133	126	*	7
WYOMING	745	680	143	120	23	39	39	*	4	141	125	*	16
PACIFIC	64,397	51,875	9,888	5,292	4,596	2,136	1,910	226	2,535	3,392	2,357	609	426
ALASKA	917	914	100	98	2	30	30	*	21	240	180	36	24
CALIFORNIA	48,651	38,307	8,127	4,215	3,912	1,551	1,382	169	2,199	2,422	1,806	301	315
HAWAII	1,779	1,616	282	157	125	38	36	2	21	92	41	51	*
OREGON	4,274	3,775	409	298	111	133	113	20	142	207	116	91	*
WASHINGTON	7,647	6,270	835	423	412	340	319	21	146	418	214	119	85
U.S. POSSESSIONS	1,129	993	135	101	34	44	30	14	4	13	*	11	2

* NO CASES REPORTED

SOURCE: NATIONAL SCIENCE FOUNDATION

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TABLE B-17. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY GEOGRAPHIC DIVISION, STATE, AND FIELD: 1983
CONTINUED

GEOGRAPHIC DIVISION AND STATE	.......LIFE SCIENTISTS........				PSY-CHOL-OGISTS	......SOCIAL SCIENTISTS.......			
	TOTAL	BIOL. SCI.	AGRIC. SCI.	MEDICAL SCI.		TOTAL	ECON-OMISTS	SOCIO/ ANTHRO.	OTHER
TOTAL..................	101,401	60,919	16,005	24,477	49,716	63,749	18,107	13,426	32,216
NEW ENGLAND............	6,916	4,768	527	1,621	4,131	5,163	1,405	1,127	2,631
CONNECTICUT............	1,831	1,289	124	418	1,320	1,081	263	154	664
MAINE..................	336	156	143	37	232	153	90	18	45
MASSACHUSETTS..........	3,641	2,639	160	842	2,365	2,890	872	723	1,295
NEW HAMPSHIRE..........	247	128	55	64	129	296	19	74	203
RHODE ISLAND...........	511	271	23	217	180	395	79	47	269
VERMONT................	350	285	22	43	205	348	82	111	155
MIDDLE ATLANTIC........	16,667	10,217	1,473	4,977	10,398	11,618	3,246	3,003	5,369
NEW JERSEY.............	2,758	1,657	318	783	1,407	1,834	492	575	767
NEW YORK...............	9,191	5,748	753	2,690	6,531	6,761	1,889	1,596	3,276
PENNSYLVANIA...........	4,718	2,812	402	1,504	2,460	3,023	865	832	1,326
EAST NORTH CENTRAL.....	15,057	8,900	2,060	4,097	7,519	9,795	2,420	2,190	5,185
ILLINOIS...............	4,423	2,646	551	1,226	2,133	3,390	929	618	1,843
INDIANA................	2,340	1,340	429	571	920	1,104	295	310	499
MICHIGAN...............	3,330	1,929	340	1,061	1,777	1,587	331	426	830
OHIO...................	3,153	1,993	281	879	2,040	2,231	595	607	1,029
WISCONSIN..............	1,811	992	459	360	649	1,483	270	229	984
WEST NORTH CENTRAL.....	8,576	4,708	1,925	1,943	2,968	4,199	1,396	1,128	1,675
IOWA...................	1,375	816	309	250	425	753	233	213	307
KANSAS.................	908	459	215	234	536	525	51	234	240
MINNESOTA..............	2,356	1,291	429	636	963	1,138	399	295	444
MISSOURI...............	2,130	1,191	402	537	655	1,102	477	152	473
NORTH DAKOTA...........	470	213	229	28	134	84	*	29	55
NEBRASKA...............	1,032	547	238	247	195	391	191	92	108
SOUTH DAKOTA...........	305	191	103	11	60	206	45	113	48
SOUTH ATLANTIC.........	19,216	11,594	3,185	4,437	7,810	13,320	4,505	1,659	7,156
DELAWARE...............	475	182	150	143	111	243	169	59	15
DISTRICT OF COLUMBIA..	2,107	1,195	319	593	569	4,766	1,891	122	2,753
FLORIDA................	2,297	1,309	474	514	1,846	1,516	262	203	1,051
GEORGIA................	2,178	1,340	362	476	793	702	221	145	336
MARYLAND...............	5,358	3,460	555	1,343	1,583	1,943	645	435	863
NORTH CAROLINA.........	3,226	2,011	576	639	951	1,239	296	298	645
SOUTH CAROLINA.........	913	502	234	177	281	582	302	97	183
VIRGINIA...............	2,179	1,330	414	435	1,582	1,981	657	247	1,077
WEST VIRGINIA..........	483	265	101	117	94	348	62	53	233
EAST SOUTH CENTRAL.....	4,846	2,725	1,062	1,059	2,247	2,449	665	464	1,320
ALABAMA................	1,272	673	299	300	465	550	100	177	273
KENTUCKY...............	896	500	170	226	497	696	247	66	383
MISSISSIPPI............	1,121	485	383	253	288	404	40	110	254
TENNESSEE..............	1,557	1,067	210	280	997	799	278	111	410
WEST SOUTH CENTRAL.....	8,549	4,961	1,715	1,873	3,082	4,417	1,146	918	2,353
ARKANSAS...............	548	262	172	114	108	401	216	135	50
LOUISIANA..............	1,505	921	341	243	448	713	224	197	292
OKLAHOMA...............	1,075	599	196	280	548	729	187	142	400
TEXAS..................	5,421	3,179	1,006	1,236	1,978	2,574	519	444	1,611
MOUNTAIN...............	5,984	3,315	1,559	1,110	2,681	3,334	888	934	1,512
ARIZONA................	1,096	575	256	265	649	700	186	156	358
COLORADO...............	1,868	1,041	438	389	956	862	202	218	442
IDAHO..................	477	245	194	38	171	245	132	17	96
MONTANA................	627	344	216	67	110	287	70	157	60
NEW MEXICO.............	686	360	192	134	203	395	47	184	164
NEVADA.................	171	108	36	27	86	197	63	90	44
UTAH...................	880	556	149	175	427	553	179	106	268
WYOMING................	179	86	78	15	79	95	9	6	80
PACIFIC................	15,590	9,731	2,499	3,360	8,880	9,454	2,436	2,003	5,015
ALASKA.................	177	23	103	51	102	244	94	47	103
CALIFORNIA.............	10,567	7,013	1,103	2,451	7,018	6,423	1,653	1,344	3,426
HAWAII.................	543	316	125	102	157	483	88	126	269
OREGON.................	1,477	760	479	238	553	854	283	162	409
WASHINGTON.............	2,326	1,347	536	443	977	1,226	253	260	713
U.S. POSSESSIONS......	500	272	153	75	73	224	65	64	95

* NO CASES REPORTED

SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE B-17. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS BY GEOGRAPHIC DIVISION, STATE, AND FIELD: 1983
CONTINUED

GEOGRAPHIC DIVISION AND STATE	TOTAL	ENGINEERS AERO/ ASTRO	CHEM	CIVIL	ELEC./ ELECTRN	MAT'LS SCI	MECH	NUCLEAR	SYSTEMS DESIGN	OTHER ENGIN
TOTAL	63,786	3,724	7,713	5,504	13,081	7,596	5,923	2,331	3,962	13,952
NEW ENGLAND	4,285	153	496	528	975	485	417	24	427	780
CONNECTICUT	806	16	103	102	151	80	65	24	65	200
MAINE	271	*	91	22	*	43	*	*	*	115
MASSACHUSETTS	2,465	137	192	254	690	331	217	*	242	402
NEW HAMPSHIRE	290	*	33	101	31	17	54	*	40	14
RHODE ISLAND	377	*	77	13	79	14	80	*	80	34
VERMONT	76	*	*	36	24	*	1	*	*	15
MIDDLE ATLANTIC	12,520	183	1,961	803	2,802	2,031	962	496	1,051	2,231
NEW JERSEY	4,363	67	960	160	1,165	554	195	1	484	777
NEW YORK	4,865	103	525	289	1,088	806	448	188	411	1,007
PENNSYLVANIA	3,292	13	476	354	549	671	319	307	156	447
EAST NORTH CENTRAL	9,001	446	1,272	612	1,551	1,278	982	309	250	2,301
ILLINOIS	2,626	78	473	234	506	195	136	196	20	788
INDIANA	947	72	25	73	320	104	95	*	66	192
MICHIGAN	1,824	84	160	207	192	222	213	*	89	657
OHIO	2,930	212	522	76	509	637	416	85	58	415
WISCONSIN	674	*	92	22	24	120	122	28	17	249
WEST NORTH CENTRAL	2,747	171	346	386	395	377	324	71	96	501
IOWA	303	48	*	*	45	8	37	*	*	165
KANSAS	319	36	48	147	2	*	49	*	11	26
MINNESOTA	665	10	30	52	201	247	62	*	27	36
MISSOURI	1,035	70	246	157	84	122	133	36	56	129
NORTH DAKOTA	92	*	*	27	*	*	43	*	*	22
NEBRASKA	228	7	22	3	48	*	*	*	*	148
SOUTH DAKOTA	105	*	*	*	15	*	*	35	*	55
SOUTH ATLANTIC	9,750	713	1,089	876	1,673	887	1,053	407	805	2,247
DELAWARE	784	*	439	17	1	203	43	*	44	37
DISTRICT OF COLUMBIA	1,289	89	72	55	113	154	203	96	177	330
FLORIDA	1,357	22	112	229	294	112	192	56	62	278
GEORGIA	664	31	31	57	121	66	81	90	2	185
MARYLAND	1,658	133	55	61	397	90	214	58	92	558
NORTH CAROLINA	972	*	97	126	336	96	23	34	1	259
SOUTH CAROLINA	444	*	88	115	37	39	*	71	*	94
VIRGINIA	2,443	438	158	216	328	112	275	2	427	487
WEST VIRGINIA	139	*	37	*	46	15	22	*	*	19
EAST SOUTH CENTRAL	2,333	298	314	134	424	345	248	35	82	453
ALABAMA	779	129	186	22	124	78	87	*	*	153
KENTUCKY	213	*	*	*	22	15	*	*	14	162
MISSISSIPPI	314	45	*	17	84	22	81	*	*	65
TENNESSEE	1,027	124	128	95	194	230	80	35	68	73
WEST SOUTH CENTRAL	5,769	243	1,065	431	807	460	339	22	211	2,191
ARKANSAS	105	*	*	103	*	*	*	*	*	2
LOUISIANA	838	*	302	163	105	38	47	*	35	148
OKLAHOMA	854	37	130	26	50	43	106	*	1	471
TEXAS	3,972	215	633	133	652	379	186	22	175	1,570
MOUNTAIN	4,859	186	461	595	1,080	630	524	399	101	883
ARIZONA	823	44	15	54	233	163	107	37	*	170
COLORADO	1,516	120	165	290	467	95	96	35	9	239
IDAHO	299	*	29	49	*	11	114	13	*	83
MONTANA	65	*	*	*	*	14	*	*	*	51
NEW MEXICO	1,260	*	80	45	231	167	128	314	92	203
NEVADA	54	*	*	17	*	*	*	*	*	37
UTAH	777	22	172	118	106	180	79	*	*	100
WYOMING	65	*	*	22	43	*	*	*	*	*
PACIFIC	12,522	1,331	709	1,139	3,374	1,103	1,074	568	939	2,285
ALASKA	3	*	*	*	*	*	3	*	*	*
CALIFORNIA	10,344	1,120	625	815	3,168	735	908	356	677	1,940
HAWAII	163	*	*	59	7	*	27	2	*	68
OREGON	499	*	3	27	90	180	*	35	46	118
WASHINGTON	1,377	211	69	229	98	188	133	175	122	152
U.S. POSSESSIONS	136	*	12	9	11	*	3	*	94	7

* NO CASES REPORTED

SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE B-18. MEDIAN ANNUAL SALARIES OF DOCTORAL SCIENTISTS AND ENGINEERS BY GEOGRAPHIC DIVISION, STATE, AND FIELD: 1983

GEOGRAPHIC DIVISION AND STATE	ENGINEERS									
	TOTAL	AERO/ ASTRO	CHEM	CIVIL	ELEC./ ELECTRN	MAT'LS SCI	MECH	NUCLEAR	SYSTEMS DESIGN	OTHER ENGIN
TOTAL....................	$46,600	$47,500	$50,600	$42,500	$48,600	$47,400	$45,500	$46,200	$48,400	$45,300
NEW ENGLAND..............	45,700	**	55,000	**	50,100	**	**	**	43,700	[illegible]
CONNECTICUT............	44,900	**	**	**	**	**	**	**	**	**
MAINE..................	**	**	**	**	**	**	**	**	**	**
MASSACHUSETTS..........	46,900	**	**	**	48,400	**	**	**	**	**
NEW HAMPSHIRE..........	**	**	**	**	**	**	**	**	**	**
RHODE ISLAND...........	**	**	**	**	**	**	**	**	**	**
VERMONT................	**	**	**	**	**	**	**	**	**	**
MIDDLE ATLANTIC..........	49,100	**	50,300	45,500	50,100	52,300	45,400	**	44,700	46,700
NEW JERSEY.............	49,700	**	50,100	**	55,100	57,600	**	**	43,200	48,900
NEW YORK...............	50,200	**	**	**	51,100	50,800	**	**	**	50,400
PENNSYLVANIA...........	45,900	**	**	**	**	50,600	**	**	**	**
EAST NORTH CENTRAL.......	44,100	**	47,000	40,900	46,300	44,400	44,100	**	**	44,100
ILLINOIS...............	44,900	**	**	**	41,800	**	**	**	**	40,700
INDIANA................	45,100	**	**	**	**	**	**	**	**	**
MICHIGAN...............	44,000	**	**	**	**	**	**	**	**	47,700
OHIO...................	42,700	**	**	**	**	42,800	**	**	**	**
WISCONSIN..............	41,800	**	**	**	**	**	**	**	**	**
WEST NORTH CENTRAL.......	44,900	**	**	**	**	**	**	**	**	43,600
IOWA...................	**	**	**	**	**	**	**	**	**	**
KANSAS.................	**	**	**	**	**	**	**	**	**	**
MINNESOTA..............	50,400	**	**	**	**	**	**	**	**	**
MISSOURI...............	45,100	**	**	**	**	**	**	**	**	**
NORTH DAKOTA...........	**	**	**	**	**	**	**	**	**	**
NEBRASKA...............	**	**	**	**	**	**	**	**	**	**
SOUTH DAKOTA...........	**	**	**	**	**	**	**	**	**	**
SOUTH ATLANTIC...........	47,500	48,800	50,500	42,000	46,100	30,300	50,000	**	53,000	42,400
DELAWARE...............	49,300	**	**	**	**	**	**	**	**	**
DISTRICT OF COLUMBIA..	53,300	**	**	**	**	**	**	**	**	**
FLORIDA................	44,800	**	**	**	**	**	**	**	**	**
GEORGIA................	50,500	**	**	**	**	**	**	**	**	**
MARYLAND...............	47,500	**	**	**	**	**	**	**	**	42,500
NORTH CAROLINA.........	40,500	**	**	**	**	**	**	**	**	**
SOUTH CAROLINA.........	**	**	**	**	**	**	**	**	**	**
VIRGINIA...............	48,300	**	**	**	**	**	**	**	54,500	45,100
WEST VIRGINIA..........	**	**	**	**	**	**	**	**	**	**
EAST SOUTH CENTRAL.......	42,800	**	**	**	**	**	**	**	**	**
ALABAMA................	44,000	**	**	**	**	**	**	**	**	**
KENTUCKY...............	**	**	**	**	**	**	**	**	**	**
MISSISSIPPI............	**	**	**	**	**	**	**	**	**	**
TENNESSEE..............	42,300	**	**	**	**	**	**	**	**	**
WEST SOUTH CENTRAL.......	47,800	**	56,700	**	45,600	**	**	**	**	49,300
ARKANSAS...............	**	**	**	**	**	**	**	**	**	**
LOUISIANA..............	43,100	**	**	**	**	**	**	**	**	**
OKLAHOMA...............	52,200	**	**	**	**	**	**	**	**	**
TEXAS..................	50,200	**	57,100	**	48,200	**	**	**	**	49,100
MOUNTAIN.................	46,500	**	**	45,600	50,400	44,200	**	**	**	46,300
ARIZONA................	46,400	**	**	**	**	**	**	**	**	**
COLORADO...............	47,600	**	**	**	**	**	**	**	**	**
IDAHO..................	**	**	**	**	**	**	**	**	**	**
MONTANA................	**	**	**	**	**	**	**	**	**	**
NEW MEXICO.............	47,000	**	**	**	**	**	**	**	**	**
NEVADA.................	**	**	**	**	**	**	**	**	**	**
UTAH...................	45,600	**	**	**	**	**	**	**	**	**
WYOMING................	**	**	**	**	**	**	**	**	**	**
PACIFIC..................	47,600	45,500	51,900	44,300	51,600	44,400	47,300	46,600	51,300	43,500
ALASKA	**	**	**	**	**	**	**	**	**	**
CALIFORNIA.............	49,700	48,500	51,600	45,700	53,600	48,500	50,000	**	51,700	45,800
HAWAII.................	**	**	**	**	**	**	**	**	**	**
OREGON.................	**	**	**	**	**	**	**	**	**	**
WASHINGTON.............	39,900	**	**	**	**	**	**	**	**	**
U.S. POSSESSIONS......	**	**	**	**	**	**	**	**	**	**

** NO MEDIAN COMPUTED FOR GROUPS WITH FEWER THAN 20 INDIVIDUALS REPORTING SALARY

NOTE: MEDIAN SALARIES COMPUTED ONLY FOR FULL-TIME EMPLOYED CIVILIANS

SOURCE: NATIONAL SCIENCE FOUNDATION

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TABLE B-18. MEDIAN ANNUAL SALARIES OF DOCTORAL SCIENTISTS AND ENGINEERS
BY GEOGRAPHIC DIVISION, STATE, AND FIELD: 1983

CONTINUED

GEOGRAPHIC DIVISION AND STATE	.......LIFE SCIENTISTS........				PSY-CHOL-OGISTS	......SOCIAL SCIENTISTS.......			
	TOTAL	BIOL. SCI.	AGRIC. SCI.	MEDICAL SCI.		TOTAL	ECON-OMISTS	SOCIO/ ANTHRO.	OTHER
TOTAL....................	$37,300	$36,200	$37,900	$41,200	$35,800	$36,000	$41,400	$32,100	$35,000
NEW ENGLAND.............	36,000	35,100	39,500	37,400	33,600	36,400	41,100	34,200	35,000
CONNECTICUT...........	37,600	36,600	**	46,300	39,100	36,200	**	**	36,400
MAINE.................	25,900	**	**	**	**	**	**	**	**
MASSACHUSETTS.........	36,700	36,400	**	37,000	31,400	39,200	45,300	36,200	36,700
NEW HAMPSHIRE.........	35,600	**	**	**	**	**	**	**	**
RHODE ISLAND..........	32,500	**	**	**	**	**	**	**	**
VERMONT...............	30,400	**	**	**	**	**	**	**	**
MIDDLE ATLANTIC.........	38,900	37,000	36,400	45,500	36,600	35,600	40,300	32,100	35,100
NEW JERSEY............	44,500	40,500	46,000	50,700	39,500	32,600	38,700	32,800	30,200
NEW YORK..............	37,700	36,500	30,900	45,300	36,600	36,300	40,600	33,100	35,900
PENNSYLVANIA..........	38,300	35,700	40,300	44,200	34,200	34,100	36,800	30,900	31,700
EAST NORTH CENTRAL......	38,300	37,500	38,200	40,200	34,900	35,000	39,700	31,300	34,100
ILLINOIS..............	36,900	36,200	35,400	40,200	34,500	36,000	37,900	30,800	36,000
INDIANA...............	38,600	40,300	38,900	37,100	33,300	30,800	**	**	30,400
MICHIGAN..............	39,800	40,000	36,800	41,200	36,400	36,500	**	30,700	36,800
OHIO..................	37,800	36,700	42,500	41,800	32,200	34,800	43,000	33,900	32,700
WISCONSIN.............	38,000	36,800	42,000	36,700	36,900	33,000	**	**	45,800
WEST NORTH CENTRAL......	36,800	36,000	36,700	42,300	35,700	32,300	40,000	28,600	30,400
IOWA..................	36,900	39,000	36,600	42,700	32,400	37,000	**	**	**
KANSAS................	35,400	36,100	32,300	36,700	38,900	30,200	**	**	**
MINNESOTA.............	39,900	36,700	40,300	45,400	35,100	31,600	**	**	31,300
MISSOURI..............	36,800	36,200	36,400	40,100	36,400	35,800	**	**	**
NORTH DAKOTA..........	37,000	**	**	**	**	**	**	**	**
NEBRASKA..............	36,200	36,000	34,500	42,000	**	33,100	**	**	**
SOUTH DAKOTA..........	32,800	**	**	**	**	**	**	**	**
SOUTH ATLANTIC..........	39,200	36,800	39,700	44,000	35,900	40,300	47,900	31,500	37,400
DELAWARE..............	45,900	40,300	**	**	**	**	**	**	**
DISTRICT OF COLUMBIA..	45,200	43,000	52,500	49,300	49,800	49,000	56,700	**	45,700
FLORIDA...............	36,000	33,500	38,000	40,000	33,900	31,200	**	**	28,900
GEORGIA...............	39,200	38,000	39,800	44,000	36,600	31,000	**	**	26,200
MARYLAND..............	42,000	40,500	39,800	52,600	38,200	40,500	46,400	36,700	44,200
NORTH CAROLINA........	36,200	32,800	38,200	39,000	30,300	29,600	**	**	28,500
SOUTH CAROLINA........	33,400	29,800	34,400	43,300	**	33,900	**	**	**
VIRGINIA..............	35,400	32,800	34,900	39,200	34,100	36,300	36,200	**	38,100
WEST VIRGINIA.........	35,400	30,800	**	**	**	**	**	**	**
EAST SOUTH CENTRAL......	34,300	33,700	34,400	36,500	34,100	33,500	35,500	31,000	32,100
ALABAMA...............	34,100	33,100	35,300	35,400	31,800	34,600	**	**	**
KENTUCKY..............	34,500	33,900	**	37,300	31,900	35,200	**	**	**
MISSISSIPPI...........	34,400	33,900	34,500	36,400	**	**	**	**	**
TENNESSEE.............	33,700	33,700	**	41,100	34,800	33,600	**	**	**
WEST SOUTH CENTRAL......	37,600	35,500	38,700	42,700	35,700	34,300	43,100	30,800	32,300
ARKANSAS..............	30,800	28,900	**	**	**	34,600	**	**	**
LOUISIANA.............	35,300	31,400	35,900	40,200	36,000	32,700	**	**	**
OKLAHOMA..............	36,400	31,300	**	43,400	42,800	36,100	**	**	**
TEXAS.................	40,200	37,300	40,100	45,300	34,200	33,600	43,900	32,500	31,900
MOUNTAIN................	35,700	34,000	37,200	37,400	34,800	36,300	38,000	35,500	34,300
ARIZONA...............	38,400	37,800	38,700	39,600	34,900	37,300	**	**	**
COLORADO..............	36,100	34,300	38,000	39,400	37,200	37,200	**	**	**
IDAHO.................	33,400	**	**	**	**	**	**	**	**
MONTANA...............	32,800	**	**	**	**	**	**	**	**
NEW MEXICO............	35,800	32,800	**	**	**	**	**	**	**
NEVADA................	**	**	**	**	**	**	**	**	**
UTAH..................	35,500	32,000	**	**	36,200	43,100	**	**	**
WYOMING...............	**	**	**	**	**	**	**	**	**
PACIFIC.................	36,900	36,400	37,500	39,900	38,700	37,800	44,400	35,400	36,900
ALASKA................	**	**	**	**	**	**	**	**	**
CALIFORNIA............	38,300	36,900	40,100	41,300	39,800	40,300	44,700	38,800	37,600
HAWAII................	35,300	35,300	35,600	**	**	36,200	**	**	**
OREGON................	35,600	35,300	36,400	33,600	39,000	30,500	**	**	**
WASHINGTON............	35,600	35,400	33,800	39,300	30,000	34,700	**	**	33,800
U.S. POSSESSIONS......	27,100	**	**	**	**	**	**	**	**

** NO MEDIAN COMPUTED FOR GROUPS WITH FEWER THAN 20 INDIVIDUALS REPORTING SALARY

NOTE: MEDIAN SALARIES COMPUTED ONLY FOR FULL-TIME EMPLOYED CIVILIANS

SOURCE: NATIONAL SCIENCE FOUNDATION

BEST COPY AVAILABLE

TABLE B-18. MEDIAN ANNUAL SALARIES OF DOCTORAL SCIENTISTS AND ENGINEERS
CONTINUED BY GEOGRAPHIC DIVISION, STATE, AND FIELD: 1983

GEOGRAPHIC DIVISION AND STATE	TOTAL	TOTAL SCIENTISTS	PHYSICAL SCIENTISTS			...MATH. SCIENTISTS....			COMP/ INFRM. SPEC.	ENVIRONMENTAL SCIENTISTS			
			TOTAL	CHEMISTS	PHYSICISTS/ ASTRON.	TOTAL	MATH.	STAT.		[illegible]	EARTH SCI.	OCEAN.	ATMOS. SCI.
TOTAL	$40,100	$38,200	$42,300	$41,900	$42,900	$36,600	$36,400	$37,400	$40,400	$40,900	$41,500	$36,700	$41,600
NEW ENGLAND	38,500	36,900	41,600	42,900	40,300	34,800	36,500	**	36,800	36,900	36,600	38,900	**
CONNECTICUT	40,400	40,100	46,600	45,700	47,300	47,200	47,400	**	**	**	**	**	**
MAINE	33,700	32,100	**	**	**	**	**	**	**	**	**	**	**
MASSACHUSETTS	39,300	37,300	42,500	44,400	39,600	35,600	35,200	**	38,900	36,200	37,000	**	**
NEW HAMPSHIRE	35,600	31,600	**	**	**	**	**	**	**	**	**	**	**
RHODE ISLAND	36,600	35,100	**	**	**	**	**	**	**	**	**	**	**
VERMONT	30,200	29,800	**	**	**	**	**	**	**	**	**	**	**
MIDDLE ATLANTIC	41,400	39,700	44,100	43,600	45,000	39,600	39,500	45,500	42,600	37,200	38,800	28,600	40,100
NEW JERSEY	45,200	42,800	45,700	45,100	48,200	45,500	44,400	**	49,400	36,500	39,700	**	**
NEW YORK	40,400	39,000	43,300	43,100	44,100	39,300	39,200	**	40,800	36,200	38,600	**	**
PENNSYLVANIA	40,100	36,800	40,400	40,500	40,100	37,000	36,700	**	42,900	39,500	36,600	**	**
EAST NORTH CENTRAL	38,900	37,300	40,900	41,000	40,800	36,100	35,800	37,300	40,100	37,300	37,600	**	**
ILLINOIS	39,100	37,000	40,300	38,800	41,800	40,100	40,700	**	40,100	40,800	40,700	**	**
INDIANA	36,600	35,600	37,500	38,200	**	31,400	31,800	**	**	**	**	**	**
MICHIGAN	40,000	38,900	43,800	44,700	41,300	37,100	35,700	**	40,600	36,700	36,400	**	**
OHIO	39,800	38,100	43,400	43,300	43,800	36,000	34,100	**	41,400	36,800	36,900	**	**
WISCONSIN	37,300	36,200	35,700	37,200	**	36,400	36,200	**	**	39,300	**	**	**
WEST NORTH CENTRAL	36,700	36,000	39,000	38,300	39,500	31,400	29,500	36,300	38,400	36,900	39,900	**	**
IOWA	36,300	35,900	32,700	**	**	29,900	28,600	**	**	**	**	**	**
KANSAS	36,700	35,600	**	**	**	**	**	**	**	**	**	**	**
MINNESOTA	38,700	37,700	40,500	40,600	**	43,500	44,100	**	**	**	**	**	**
MISSOURI	38,200	36,800	44,200	44,000	**	28,300	28,100	**	30,700	**	**	**	**
NORTH DAKOTA	35,100	34,100	**	**	**	**	**	**	**	**	**	**	**
NEBRASKA	34,300	33,300	**	**	**	**	**	**	**	**	**	**	**
SOUTH DAKOTA	31,900	30,900	**	**	**	**	**	**	**	**	**	**	**
SOUTH ATLANTIC	40,900	40,100	42,800	40,700	45,000	38,400	36,300	42,000	40,100	44,600	45,100	38,500	48,400
DELAWARE	48,100	46,500	48,000	47,500	**	**	**	**	**	**	**	**	**
DISTRICT OF COLUMBIA	49,000	48,300	50,300	43,900	53,400	46,000	42,800	**	43,100	50,300	52,000	**	**
FLORIDA	38,700	35,500	40,500	39,900	**	40,100	35,800	**	34,100	35,300	**	**	**
GEORGIA	38,400	36,900	32,300	32,100	**	31,300	30,200	**	40,100	**	**	**	**
MARYLAND	42,400	41,600	42,300	40,100	44,400	41,900	42,100	**	47,500	49,900	53,300	**	**
NORTH CAROLINA	35,000	34,300	38,100	36,700	**	33,500	34,900	**	**	**	**	**	**
SOUTH CAROLINA	36,800	35,300	40,900	**	**	**	**	**	**	**	**	**	**
VIRGINIA	40,400	36,900	43,300	40,000	47,100	35,200	35,200	**	42,900	43,200	42,300	**	**
WEST VIRGINIA	35,400	35,300	45,200	45,300	**	**	**	**	**	**	**	**	**
EAST SOUTH CENTRAL	35,700	34,700	37,400	39,700	36,700	31,400	30,600	**	39,500	36,700	36,300	**	**
ALABAMA	36,700	34,600	36,300	**	**	33,000	33,300	**	**	**	**	**	**
KENTUCKY	35,900	35,400	45,200	**	**	31,600	**	**	**	**	**	**	**
MISSISSIPPI	34,000	32,000	**	**	**	**	**	**	**	**	**	**	**
TENNESSEE	35,000	35,100	36,400	36,200	36,800	33,200	**	**	**	**	**	**	**
WEST SOUTH CENTRAL	40,300	37,600	40,900	41,200	36,900	36,800	36,700	**	38,700	45,900	46,400	**	**
ARKANSAS	32,600	31,700	**	**	**	**	**	**	**	**	**	**	**
LOUISIANA	38,400	36,300	40,700	40,600	**	41,300	41,300	**	**	42,500	45,900	**	**
OKLAHOMA	40,900	37,800	40,500	40,700	**	**	**	**	**	49,600	51,400	**	**
TEXAS	40,800	38,600	41,400	41,700	40,300	36,400	36,200	**	39,100	46,900	47,600	**	**
MOUNTAIN	40,200	[illegible]	42,500	38,800	43,500	37,900	39,700	**	35,700	45,400	44,900	**	47,000
ARIZONA	40,300	[illegible]	42,200	**	**	**	**	**	**	50,500	**	**	**
COLORADO	40,500	38,900	40,800	37,200	44,800	33,500	35,500	**	39,000	48,400	46,600	**	54,900
IDAHO	36,700	35,100	**	**	**	**	**	**	**	**	**	**	**
MONTANA	33,400	32,700	**	**	**	**	**	**	**	**	**	**	**
NEW MEXICO	44,300	41,800	44,800	49,800	43,700	39,600	47,100	**	**	44,700	**	**	**
NEVADA	35,900	36,400	**	**	**	**	**	**	**	**	**	**	**
UTAH	36,800	36,000	**	**	**	**	**	**	**	**	**	**	**
WYOMING	41,900	40,200	**	**	**	**	**	**	**	**	**	**	**
PACIFIC	41,500	40,000	44,800	44,500	45,000	38,000	38,200	37,200	41,600	40,500	40,500	37,400	44,500
ALASKA	50,800	50,800	**	**	**	**	**	**	**	55,900	**	**	**
CALIFORNIA	44,000	40,900	44,900	44,400	45,600	37,900	37,200	38,800	41,300	40,900	40,600	38,200	44,700
HAWAII	39,100	37,900	**	**	**	**	**	**	**	**	**	**	**
OREGON	35,500	35,300	37,500	**	**	**	**	**	**	32,100	**	**	**
WASHINGTON	36,300	35,000	40,100	34,300	42,900	40,800	41,100	**	**	34,800	31,200	**	**
U.S. POSSESSIONS	31,100	28,700	30,300	**	**	**	**	**	**	**	**	**	**

**NO MEDIAN COMPUTED FOR GROUPS WITH FEWER THAN 20 INDIVIDUALS REPORTING SALARY

NOTE: MEDIAN SALARIES COMPUTED ONLY FOR FULL-TIME EMPLOYED CIVILIANS

SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE B-19. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS WHO ARE UNIVERSITY OR FOUR-YEAR COLLEGE TEACHERS BY FIELD, SEX, AND ACADEMIC RANK: 1983

FIELD AND SEX	TOTAL	PROFESSOR	ASSOCIATE PROFESSOR	ASSISTANT PROFESSOR	INSTRUC-TOR	OTHER	NO REPORT
ALL FIELDS							
TOTAL...................	135,990	62,358	40,789	26,529	745	4,171	1,398
MEN...................	117,462	58,490	34,838	19,934	373	2,865	962
WOMEN...................	18,528	3,868	5,951	6,595	372	1,306	436
SCIENTISTS							
TOTAL...................	121,088	54,311	36,557	24,267	743	3,918	1,292
MEN...................	102,783	50,468	30,687	17,763	373	2,631	861
WOMEN...................	18,305	3,843	5,870	6,504	370	1,287	431
PHYSICAL SCIENTISTS							
TOTAL...................	17,656	10,546	4,074	2,281	102	521	132
MEN...................	16,430	10,178	3,735	1,920	50	426	121
WOMEN...................	1,226	368	339	361	52	95	11
CHEMISTS							
TOTAL...................	10,376	6,206	2,260	1,464	54	317	75
MEN...................	9,375	5,911	1,980	1,172	10	235	67
WOMEN...................	1,001	295	280	292	44	82	8
PHYSICISTS/ASTRONOMERS							
TOTAL...................	7,280	4,340	1,814	817	48	204	57
MEN...................	7,055	4,267	1,755	748	40	191	54
WOMEN...................	225	73	59	69	8	13	3
MATHEMATICAL SCIENTISTS							
TOTAL...................	11,289	5,295	3,523	2,148	115	132	76
MEN...................	10,314	5,079	3,205	1,790	97	92	51
WOMEN...................	975	216	318	358	18	40	25
MATHEMATICIANS							
TOTAL...................	9,689	4,674	2,943	1,809	106	106	51
MEN...................	8,899	4,473	2,677	1,561	90	72	26
WOMEN...................	790	201	266	248	16	34	25
STATISTICIANS							
TOTAL...................	1,600	621	580	339	9	26	25
MEN...................	1,415	606	528	229	7	20	25
WOMEN...................	185	15	52	110	2	6	*
COMPUTER/INFORMATION SPECIALISTS							
TOTAL...................	2,559	842	898	688	5	117	9
MEN...................	2,359	809	844	610	*	92	4
WOMEN...................	200	33	54	78	5	25	5
ENVIRONMENTAL SCIENTISTS							
TOTAL...................	4,505	2,073	1,291	957	4	129	51
MEN...................	4,295	2,039	1,234	871	*	102	49
WOMEN...................	210	34	57	86	4	27	2
EARTH SCIENTISTS							
TOTAL...................	3,445	1,727	968	630	4	69	47
MEN...................	3,298	1,698	937	568	*	50	45
WOMEN...................	147	29	31	62	4	19	2
OCEANOGRAPHERS							
TOTAL...................	505	167	175	134	*	27	2
MEN...................	463	165	163	110	*	23	2
WOMEN...................	42	2	12	24	*	4	*
ATMOSPHERIC SCIENTISTS							
TOTAL...................	555	179	148	193	*	33	2
MEN...................	534	176	134	193	*	29	2
WOMEN...................	21	3	14	*	*	4	*
LIFE SCIENTISTS							
TOTAL...................	35,415	14,911	10,693	7,497	258	1,669	387
MEN...................	29,130	13,679	8,651	5,412	92	1,075	221
WOMEN...................	6,285	1,232	2,042	2,085	166	594	166
BIOLOGICAL SCIENTISTS							
TOTAL...................	23,428	9,717	7,303	4,896	195	1,143	174
MEN...................	19,311	8,920	6,018	3,563	54	671	85
WOMEN...................	4,117	797	1,285	1,333	141	472	89
AGRICULTURAL SCIENTISTS							
TOTAL...................	4,309	2,175	1,091	856	3	153	31
MEN...................	4,137	2,151	1,062	750	*	147	27
WOMEN...................	172	24	29	106	3	6	4
MEDICAL SCIENTISTS							
TOTAL...................	7,678	3,019	2,299	1,745	60	373	182
MEN..........	5,682	2,608	1,571	1,099	38	257	109
WOMEN...................	1,996	411	728	646	22	116	73
PSYCHOLOGISTS							
TOTAL...................	14,956	6,157	4,822	3,195	110	429	243
MEN...................	11,049	5,358	3,584	1,750	31	179	147
WOMEN...................	3,907	799	1,238	1,445	79	250	96
SOCIAL SCIENTISTS							
TOTAL...................	34,708	14,487	11,256	7,501	149	921	394
MEN...................	29,206	13,326	9,434	5,410	103	665	268
WOMEN...................	5,502	1,161	1,822	2,091	46	256	126
ECONOMISTS							
TOTAL...................	9,587	4,575	2,558	1,986	71	294	103
MEN...................	8,818	4,365	2,344	1,707	68	243	91
WOMEN...................	769	210	214	279	3	51	12
SOCIOLOGISTS/ANTHRO.							
TOTAL...................	8,275	3,060	2,874	2,009	*	208	124
MEN...................	5,954	2,569	2,064	1,151	*	120	50
WOMEN...................	2,321	491	810	858	*	88	74
OTHER SOCIAL SCIENTISTS							
TOTAL...................	16,846	6,852	5,824	3,506	78	419	167
MEN...................	14,434	6,392	5,026	2,552	35	302	127
WOMEN...................	2,412	460	798	954	43	117	40

* NO CASES REPORTED

TABLE B-19. NUMBER OF DOCTORAL SCIENTISTS AND ENGINEERS WHO ARE UNIVERSITY OR
CONTINUED FOUR-YEAR COLLEGE TEACHERS BY FIELD, SEX, AND ACADEMIC RANK: 1983

FIELD AND SEX	TOTAL	PROFESSOR	ASSOCIATE PROFESSOR	ASSISTANT PROFESSOR	INSTRUCTOR	OTHER	NO REPORT
ENGINEERS							
TOTAL....................	14,902	8,047	4,232	2,262	2	253	106
MEN....................	14,679	8,022	4,151	2,171	*	234	101
WOMEN....................	223	25	81	91	2	19	5
AERO/ASTRO ENGINEERS							
TOTAL....................	626	455	142	27	*	2	*
MEN....................	618	450	139	27	*	2	*
WOMEN....................	8	5	3	*	*	*	*
CHEMICAL ENGINEERS							
TOTAL....................	1,479	680	255	544	*	*	*
MEN....................	1,457	678	252	527	*	*	*
WOMEN....................	22	2	3	17	*	*	*
CIVIL ENGINEERS							
TOTAL....................	2,494	1,194	1,019	281	*	*	*
MEN....................	2,471	1,194	1,008	269	*	*	*
WOMEN....................	23	*	11	12	*	*	*
ELEC./ELECTRON. ENGINEERS							
TOTAL....................	3,058	1,719	1,074	202	*	6	57
MEN....................	3,010	1,708	1,064	183	*	*	55
WOMEN....................	48	11	10	19	*	6	2
MATERIALS SCI. ENGINEERS							
TOTAL....................	1,135	727	283	102	2	21	*
MEN....................	1,103	725	265	98	*	15	*
WOMEN....................	32	2	18	4	2	6	*
MECHANICAL ENGINEERS							
TOTAL....................	2,175	1,282	500	346	*	47	*
MEN....................	2,149	1,281	489	339	*	40	*
WOMEN....................	26	1	11	7	*	7	*
NUCLEAR ENGINEERS							
TOTAL....................	221	127	39	55	*	*	*
MEN....................	218	127	38	53	*	*	*
WOMEN....................	3	*	1	2	*	*	*
SYSTEMS DESIGN ENGINEERS							
TOTAL....................	635	284	261	44	*	*	46
MEN....................	622	284	256	36	*	*	46
WOMEN....................	13	*	5	8	*	*	*
OTHER ENGINEERS							
TOTAL....................	3,079	1,579	659	661	*	177	3
MEN....................	3,031	1,575	640	639	*	177	*
WOMEN....................	48	4	19	22	*	*	3

* NO CASES REPORTED

NOTE: INCLUDES INDIVIDUALS REPORTING TEACHING AS THEIR PRIMARY OR SECONDARY WORK ACTIVITIES

SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE B-20. MEDIAN ANNUAL SALARIES OF DOCTORAL SCIENTISTS AND ENGINEERS WHO ARE UNIVERSITY OR FOUR-YEAR COLLEGE TEACHERS BY FIELD, SALARY BASE, AND ACADEMIC RANK: 1983

FIELD AND SALARY BASE	TOTAL	PROFESSOR	ASSOCIATE PROFESSOR	ASSISTANT PROFESSOR	INSTRUCTOR	OTHER	NO REPORT
ALL FIELDS							
ACADEMIC YEAR..........	29,600	35,600	27,400	22,500	17,900	23,700	25,000
CALENDAR YEAR..........	36,700	44,100	35,100	28,200	23,500	27,600	31,700
SCIENTISTS							
ACADEMIC YEAR..........	28,800	35,000	26,900	21,900	17,900	23,800	24,500
CALENDAR YEAR..........	36,100	43,500	34,800	28,000	23,500	26,000	31,700
PHYSICAL SCIENTISTS							
ACADEMIC YEAR..........	30,300	35,300	26,900	21,500	**	**	**
CALENDAR YEAR..........	38,300	43,200	34,400	29,700	**	25,700	**
CHEMISTS							
ACADEMIC YEAR..........	29,200	33,900	26,200	21,200	**	**	**
CALENDAR YEAR..........	37,500	40,900	34,500	23,600	**	**	**
PHYSICISTS/ASTRONOMERS							
ACADEMIC YEAR..........	31,900	36,400	27,400	22,600	**	**	**
CALENDAR YEAR..........	40,700	44,200	34,100	**	**	**	**
MATHEMATICAL SCIENTISTS							
ACADEMIC YEAR..........	29,400	35,800	27,200	22,200	**	**	**
CALENDAR YEAR..........	35,000	41,200	32,400	25,300	**	**	**
MATHEMATICIANS							
ACADEMIC YEAR..........	29,800	35,700	27,100	21,900	**	**	**
CALENDAR YEAR..........	34,000	38,900	32,200	26,000	**	**	**
STATISTICIANS							
ACADEMIC YEAR..........	28,100	36,600	27,500	22,600	**	**	**
CALENDAR YEAR..........	**	**	**	**	**	**	**
COMPUTER/INFORMATION SPECIALISTS							
ACADEMIC YEAR..........	31,500	35,200	30,900	27,900	**	**	**
CALENDAR YEAR..........	33,900	**	**	**	**	**	**
ENVIRONMENTAL SCIENTISTS							
ACADEMIC YEAR..........	30,400	35,800	27,700	22,600	**	**	**
CALENDAR YEAR..........	36,000	44,900	34,600	22,600	**	**	**
EARTH SCIENTISTS							
ACADEMIC YEAR..........	30,500	35,000	27,900	23,700	**	**	**
CALENDAR YEAR..........	36,300	43,800	32,300	**	**	**	**
OCEANOGRAPHERS							
ACADEMIC YEAR..........	25,500	**	**	**	**	**	**
CALENDAR YEAR..........	33,600	**	**	**	**	**	**
ATMOSPHERIC SCIENTISTS							
ACADEMIC YEAR..........	35,400	**	**	**	**	**	**
CALENDAR YEAR..........	33,600	**	**	**	**	**	**
LIFE SCIENTISTS							
ACADEMIC YEAR..........	27,700	33,100	26,100	21,700	**	**	**
CALENDAR YEAR..........	36,600	45,000	35,500	29,400	22,600	25,500	**
BIOLOGICAL SCIENTISTS							
ACADEMIC YEAR..........	27,400	33,300	25,900	21,500	**	**	**
CALENDAR YEAR..........	35,900	45,300	35,200	29,800	**	24,600	**
AGRICULTURAL SCIENTISTS							
ACADEMIC YEAR..........	28,900	34,500	**	**	**	**	**
CALENDAR YEAR..........	35,900	40,800	34,800	27,000	**	**	**
MEDICAL SCIENTISTS							
ACADEMIC YEAR..........	28,200	31,600	26,900	22,600	**	**	**
CALENDAR YEAR..........	40,200	48,900	38,200	30,700	**	**	**
PSYCHOLOGISTS							
ACADEMIC YEAR..........	27,400	34,900	26,000	20,500	**	**	**
CALENDAR YEAR..........	35,900	42,400	36,400	26,800	**	**	**
SOCIAL SCIENTISTS							
ACADEMIC YEAR..........	28,500	35,400	27,100	22,400	**	**	**
CALENDAR YEAR..........	32,600	40,900	[illegible]	24,300	**	**	**
ECONOMISTS							
ACADEMIC YEAR..........	31,100	36,600	29,000	24,800	**	**	**
CALENDAR YEAR..........	36,300	44,700	33,900	27,100	**	**	**
SOCIOLOGISTS/ANTHRO.							
ACADEMIC YEAR..........	26,900	35,000	25,800	21,400	**	**	**
CALENDAR YEAR..........	30,900	36,300	29,400	21,900	**	**	**
OTHER SOCIAL SCIENTISTS							
ACADEMIC YEAR..........	28,100	34,500	26,700	21,500	**	**	**
CALENDAR YEAR..........	31,000	41,300	26,800	23,800	**	**	**
ENGINEERS							
ACADEMIC YEAR..........	33,700	38,400	31,200	28,500	**	**	**
CALENDAR YEAR..........	44,300	51,500	40,000	36,200	**	**	**
AERO/ASTRO ENGINEERS							
ACADEMIC YEAR..........	**	**	**	**	**	**	**
CALENDAR YEAR..........	**	**	**	**	**	**	**
CHEMICAL ENGINEERS							
ACADEMIC YEAR..........	30,900	**	**	28,500	**	**	**
CALENDAR YEAR..........	**	**	**	**	**	**	**
CIVIL ENGINEERS							
ACADEMIC YEAR..........	32,800	35,600	32,000	**	**	**	**
CALENDAR YEAR..........	44,700	**	**	**	**	**	**
ELEC./ELECTRON. ENGINEERS							
ACADEMIC YEAR..........	33,700	40,100	30,500	**	**	**	**
CALENDAR YEAR..........	51,100	**	**	**	**	**	**

** NO MEDIAN COMPUTED FOR GROUPS WITH FEWER THAN 20 INDIVIDUALS REPORTING SALARY

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TABLE B-20. MEDIAN ANNUAL SALARIES OF DOCTORAL SCIENTISTS AND ENGINEERS WHO ARE UNIVERSITY OR
CONTINUED FOUR-YEAR COLLEGE TEACHERS BY FIELD, SALARY BASE, AND ACADEMIC RANK: 1983

FIELD AND SALARY BASE	TOTAL	PROFESSOR	ASSOCIATE PROFESSOR	ASSISTANT PROFESSOR	INSTRUCTOR	OTHER	NO REPORT
MATERIALS SCI. ENGINEERS							
ACADEMIC YEAR..........	36,300	**	**	**	**	**	**
CALENDAR YEAR..........	39,600	**	**	**	**	**	**
MECHANICAL ENGINEERS							
ACADEMIC YEAR..........	35,000	37,600	**	**	**	**	**
CALENDAR YEAR..........	**	**	**	**	**	**	**
NUCLEAR ENGINEERS							
ACADEMIC YEAR..........	**	**	**	**	**	**	**
CALENDAR YEAR..........	**	**	**	**	**	**	**
SYSTEMS DESIGN ENGINEERS							
ACADEMIC YEAR..........	36,000	**	**	**	**	**	**
CALENDAR YEAR..........	**	**	**	**	**	**	**
OTHER ENGINEERS							
ACADEMIC YEAR..........	32,100	36,300	31,800	28,600	**	**	**
CALENDAR YEAR..........	42,400	**	**	**	**	**	**

** NO MEDIAN COMPUTED FOR GROUPS WITH FEWER THAN 20 INDIVIDUALS REPORTING SALARY

NOTE: INCLUDES INDIVIDUALS REPORTING TEACHING AS THEIR PRIMARY OR SECONDARY WORK ACTIVITIES
MEDIAN SALARIES COMPUTED ONLY FOR FULL TIME EMPLOYED CIVILIANS.

SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE B-21. NUMBER OF WOMEN DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, RACE, AND EMPLOYMENT STATUS: 1983

FIELD AND RACE	TOTAL	EMPLOYED FULL-TIME TOTAL	SCI/ ENG.	OTHER/ UNKNOWN FIELD	EMPLOYED PART-TIME TOTAL	SCI/ ENG.	OTHER/ UNKNOWN FIELD	POST-DOC-TORAL	UNEMP/ SEEKING EMP.	UNEMP/ NOT SEEKING EMP.	RE-TIRED	OTHER	NO REPORT
ALL FIELDS													
TOTAL....................	54,551	39,473	34,239	5,234	6,294	5,328	966	3,059	1,262	2,061	1,658	271	473
WHITE....................	48,563	34,893	30,427	4,466	5,886	5,045	841	2,562	1,094	1,879	1,573	256	420
BLACK....................	1,436	1,213	936	277	89	45	44	62	32	9	17	5	9
AM.INDIAN/ALSKN NATIVE	51	34	34	*	7	3	4	8	*	1	*	1	*
ASIAN/PACIFIC ISLANDER	3,743	2,790	2,451	339	243	181	62	390	110	139	31	7	33
OTHER....................	48	48	46	2	*	*	*	*	*	*	*	*	*
NO REPORT.............	710	495	345	150	69	54	15	37	26	33	37	2	11
SCIENTISTS													
TOTAL....................	53,417	38,461	33,267	5,194	6,257	5,296	961	3,032	1,248	2,043	1,651	268	457
WHITE....................	47,732	34,153	29,716	4,437	5,860	5,022	838	2,540	1,082	1,871	1,566	253	407
BLACK....................	1,414	1,191	916	275	89	45	44	62	32	9	17	5	9
AM.INDIAN/ALSKN NATIVE	43	26	26	*	7	3	4	8	*	1	*	1	*
ASIAN/PACIFIC ISLANDER	3,481	2,557	2,225	332	232	172	60	385	108	129	31	7	32
OTHER....................	48	48	46	2	*	*	*	*	*	*	*	*	*
NO REPORT.............	699	486	338	148	69	54	15	37	26	33	37	2	9
PHYSICAL SCIENTISTS													
TOTAL....................	4,809	3,501	3,041	460	397	315	82	277	118	276	192	11	37
WHITE....................	3,963	2,881	2,533	348	359	289	70	178	88	248	181	9	19
BLACK....................	56	54	48	6	*	*	*	*	*	*	2	*	*
AM.INDIAN/ALSKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	735	[illegible]	434	94	38	26	12	95	27	24	5	*	18
OTHER....................	1	1	1	*	*	*	*	*	*	*	*	*	*
NO REPORT.............	54	37	25	12	*	*	*	4	3	4	4	2	*
CHEMISTS													
TOTAL....................	3,978	2,905	2,527	378	314	238	76	232	102	237	160	9	19
WHITE....................	3,254	2,361	2,069	252	288	224	64	143	72	219	151	9	11
BLACK....................	49	49	43	6	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	631	466	396	70	26	14	12	85	27	14	5	*	8
OTHER....................	1	1	1	*	*	*	*	*	*	*	*	*	*
NO REPORT.............	43	28	18	10	*	*	*	4	3	4	4	*	*
PHYSICISTS/ASTRONOMERS													
TOTAL....................	831	596	514	82	83	77	6	45	16	39	32	2	18
WHITE....................	709	520	464	56	71	65	6	35	16	29	30	*	8
BLACK....................	7	5	5	*	*	*	*	*	*	*	2	*	*
AM.INDIAN/ALSKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	104	62	38	24	12	12	*	10	*	10	*	*	10
OTHER....................	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT.............	11	9	7	2	*	*	*	*	*	*	*	2	*
MATHEMATICAL SCIENTISTS													
TOTAL....................	1,561	1,242	1,091	151	152	105	47	21	7	57	52	17	13
WHITE....................	1,301	1,022	918	104	134	97	37	19	4	46	52	14	10
BLACK....................	31	28	26	2	*	*	*	*	*	*	*	3	*
AM.INDIAN/ALSKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	204	169	133	36	16	7	9	2	3	11	*	*	3
OTHER....................	2	2	2	*	*	*	*	*	*	*	*	*	*
NO REPORT.............	23	21	12	9	2	1	1	*	*	*	*	*	*
MATHEMATICIANS													
TOTAL....................	1,246	963	834	129	134	92	42	21	6	47	50	15	10
WHITE....................	1,053	805	707	98	116	84	32	19	3	38	50	12	10
BLACK....................	26	23	21	2	*	*	*	*	*	*	*	3	*
AM.INDIAN/ALSKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	144	114	94	20	16	7	9	2	3	9	*	*	*
OTHER....................	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT.............	23	21	12	9	2	1	1	*	*	*	*	*	*
STATISTICIANS													
TOTAL....................	315	279	257	22	18	13	5	*	1	10	2	2	3
WHITE....................	248	217	211	6	18	13	5	*	1	8	2	2	*
BLACK....................	5	5	5	*	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	60	55	39	16	*	*	*	*	*	2	*	*	3
OTHER....................	2	2	2	*	*	*	*	*	*	*	*	*	*
NO REPORT.............	*	*	*	*	*	*	*	*	*	*	*	*	*
COMPUTER/INFORMATION SPECIALISTS													
TOTAL....................	1,288	1,118	1,110	8	126	126	*	22	*	14	*	4	4
WHITE....................	1,122	968	961	7	119	119	*	22	*	5	*	4	4
BLACK....................	18	11	11	*	7	7	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	148	139	138	1	*	*	*	*	*	9	*	*	*
OTHER....................	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT.............	*	*	*	*	*	*	*	*	*	*	*	*	*
ENVIRONMENTAL SCIENTISTS													
TOTAL....................	988	742	706	36	124	118	6	48	27	14	22	*	11
WHITE....................	910	686	654	32	118	112	6	38	27	12	18	*	11
BLACK....................	5	5	5	*	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	60	42	38	4	6	6	*	10	*	2	*	*	*
OTHER....................	9	9	9	*	*	*	*	*	*	*	*	*	*
NO REPORT.............	4	*	*	*	*	*	*	*	*	*	4	*	*
EARTH SCIENTISTS													
TOTAL....................	704	537	507	30	85	81	4	15	26	9	22	*	10
WHITE....................	664	509	482	27	79	75	4	13	26	9	18	*	10
BLACK....................	3	3	3	*	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	31	23	20	3	6	6	*	2	*	*	*	*	*
OTHER....................	2	2	2	*	*	*	*	*	*	*	*	*	*
NO REPORT.............	4	*	*	*	*	*	*	*	*	*	4	*	*
OCEANOGRAPHERS													
TOTAL....................	190	138	132	6	28	28	*	21	*	2	*	*	1
WHITE....................	174	122	117	5	28	28	*	21	*	2	*	*	1
BLACK....................	2	2	2	*	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	7	7	6	1	*	*	*	*	*	*	*	*	*
OTHER....................	7	7	7	*	*	*	*	*	*	*	*	*	*
NO REPORT.............	*	*	*	*	*	*	*	*	*	*	*	*	*

* NO CASES REPORTED

TABLE B-21. NUMBER OF WOMEN DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, RACE, AND EMPLOYMENT STATUS: 1983
CONTINUED

FIELD AND RACE	TOTAL	EMPLOYED FULL-TIME			EMPLOYED PART-TIME			POST-DOC-TORAL	UNEMP/ SEEKING EMP.	UNEMP/ NOT SEEKING EMP.	RE-TIRED	OTHER	NO REPORT
		TOTAL	SCI/ ENG.	OTHER/ UNKNOWN FIELD	TOTAL	SCI/ ENG.	OTHER/ UNKNOWN FIELD						
ATMOSPHERIC SCIENTISTS													
TOTAL	94	67	67	*	11	9	2	12	1	3	*	*	*
WHITE	72	55	55	*	11	9	2	4	1	1	*	*	*
BLACK	*	*	*	*	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	22	12	12	*	*	*	*	8	*	2	*	*	*
OTHER	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*
LIFE SCIENTISTS													
TOTAL	18,530	12,571	11,553	1,018	1,439	1,182	257	2,219	510	849	703	82	157
WHITE	16,229	10,914	10,040	874	1,315	1,091	224	1,909	447	766	663	74	141
BLACK	447	374	301	73	19	2	17	32	12	2	6	*	2
AM.INDIAN/ALSKN NATIVE	18	9	9	*	*	*	*	7	*	1	*	1	*
ASIAN/PACIFIC ISLANDER	1,607	1,110	1,077	33	84	79	5	261	44	68	22	7	11
OTHER	7	7	5	2	*	*	*	*	*	*	*	*	*
NO REPORT	222	157	121	36	21	10	11	10	7	12	12	*	3
BIOLOGICAL SCIENTISTS													
TOTAL	12,488	7,859	7,095	764	952	761	191	1,815	444	674	593	52	99
WHITE	10,898	6,766	6,096	670	859	698	161	1,561	399	615	557	52	89
BLACK	274	215	170	45	19	2	17	20	11	1	6	*	2
AM.INDIAN/ALSKN NATIVE	9	2	2	*	*	*	*	7	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	1,168	795	776	19	54	51	3	218	27	48	18	*	8
OTHER	4	4	2	2	*	*	*	*	*	*	*	*	*
NO REPORT	135	77	49	28	20	10	10	9	7	10	12	*	*
AGRICULTURAL SCIENTISTS													
TOTAL	771	546	506	40	72	65	7	42	30	32	20	22	7
WHITE	665	481	451	30	72	65	7	29	18	26	20	15	4
BLACK	7	7	7	*	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	2	2	2	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	88	47	39	8	*	*	*	13	12	6	*	7	3
OTHER	2	2	2	*	*	*	*	*	*	*	*	*	*
NO REPORT	7	7	5	2	*	*	*	*	*	*	*	*	*
MEDICAL SCIENTISTS													
TOTAL	5,271	4,166	3,952	214	415	356	59	362	36	143	90	8	51
WHITE	4,666	3,667	3,493	174	384	328	56	319	30	125	86	7	48
BLACK	166	152	124	28	*	*	*	12	1	1	*	*	*
AM.INDIAN/ALSKN NATIVE	7	5	5	*	*	*	*	*	*	1	*	1	*
ASIAN/PACIFIC ISLANDER	351	268	262	6	30	28	2	30	5	14	4	*	*
OTHER	1	1	1	*	*	*	*	*	*	*	*	*	*
NO REPORT	80	73	67	6	1	*	1	1	*	2	*	*	3
PSYCHOLOGISTS													
TOTAL	14,934	10,643	9,296	1,347	2,833	2,659	174	207	219	409	351	119	153
WHITE	13,892	9,799	8,664	1,135	2,730	2,574	156	188	184	392	329	119	151
BLACK	475	410	308	102	35	22	13	12	7	4	5	*	2
AM.INDIAN/ALSKN NATIVE	19	14	14	*	5	3	2	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	296	237	173	64	34	31	3	7	15	3	*	*	*
OTHER	13	13	13	*	*	*	*	*	*	*	*	*	*
NO REPORT	239	170	124	46	29	29	*	*	13	10	17	*	*
SOCIAL SCIENTISTS													
TOTAL	11,307	8,644	6,470	2,174	1,186	791	395	238	367	424	331	35	82
WHITE	10,315	7,883	5,946	1,937	1,085	740	345	186	332	402	323	33	71
BLACK	382	309	217	92	28	14	14	18	13	3	4	2	5
AM.INDIAN/ALSKN NATIVE	6	3	3	*	2	*	2	1	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	431	332	232	100	54	23	31	10	19	12	4	*	*
OTHER	16	16	16	*	*	*	*	*	*	*	*	*	*
NO REPORT	157	101	56	45	17	14	3	23	3	7	*	*	6
ECONOMISTS													
TOTAL	1,598	1,313	1,143	170	109	94	15	7	15	68	84	2	*
WHITE	1,430	1,170	1,017	153	106	91	15	*	15	55	82	2	*
BLACK	34	27	27	*	*	*	*	5	*	*	2	*	*
AM.INDIAN/ALSKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	111	103	86	17	*	*	*	2	*	6	*	*	*
OTHER	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	23	13	13	*	3	3	*	*	*	7	*	*	*
SOCIOLOGISTS/ANTHRO.													
TOTAL	3,964	2,905	2,245	660	483	338	145	102	135	184	119	*	36
WHITE	3,672	2,707	2,102	605	448	319	129	69	115	178	119	*	36
BLACK	122	94	67	27	16	14	2	6	6	*	*	*	*
AM.INDIAN/ALSKN NATIVE	3	*	*	*	2	*	2	1	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	96	61	36	25	15	3	12	3	11	6	*	*	*
OTHER	14	14	14	*	*	*	*	*	*	*	*	*	*
NO REPORT	57	29	26	3	2	2	*	23	3	*	*	*	*
OTHER SOCIAL SCIENTISTS													
TOTAL	5,745	4,426	3,082	1,344	594	359	235	129	217	172	128	33	46
WHITE	5,213	4,006	2,827	1,179	531	330	201	117	202	169	122	31	35
BLACK	226	188	123	65	12	*	12	7	7	3	2	2	5
AM.INDIAN/ALSKN NATIVE	3	3	3	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	224	168	110	58	39	20	19	5	8	*	4	*	*
OTHER	2	2	2	*	*	*	*	*	*	*	*	*	*
NO REPORT	77	59	17	42	12	9	3	*	*	*	*	*	6
ENGINEERS													
TOTAL	1,134	1,012	972	40	37	32	5	27	14	18	7	3	16
WHITE	831	740	711	29	26	23	3	22	12	8	7	3	13
BLACK	22	22	20	2	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	8	8	8	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	262	233	226	7	11	9	2	5	2	10	*	*	1
OTHER	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	11	9	7	2	*	*	*	*	*	*	*	*	2
AERO/ASTRO ENGINEERS													
TOTAL	73	70	70	*	*	*	*	*	2	*	1	*	*
WHITE	48	45	45	*	*	*	*	*	2	*	1	*	*
BLACK	2	2	2	*	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	23	23	23	*	*	*	*	*	*	*	*	*	*
OTHER	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT	*	*	*	*	*	*	*	*	*	*	*	*	*

* NO CASES REPORTED

TABLE B-21. NUMBER OF WOMEN DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, RACE, AND EMPLOYMENT STATUS: 1983
CONTINUED

FIELD AND RACE	TOTAL	EMPLOYED FULL-TIME TOTAL	EMPLOYED FULL-TIME SCI/ ENG.	EMPLOYED FULL-TIME OTHER/ UNKNOWN FIELD	EMPLOYED PART-TIME TOTAL	EMPLOYED PART-TIME SCI/ ENG.	EMPLOYED PART-TIME OTHER/ UNKNOWN FIELD	POST-DOC-TORAL	UNEMP/ SEEKING EMP.	UNEMP/ NOT SEEKING EMP.	RE-TIRED	OTHER	NO REPORT
CHEMICAL ENGINEERS													
TOTAL....................	113	93	86	7	2	2	*	2	6	6	*	*	4
WHITE..................	73	56	52	4	2	2	*	2	6	4	*	*	3
BLACK..................	3	3	3	*	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	34	31	28	3	*	*	*	*	*	2	*	*	1
OTHER..................	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT.............	3	3	3	*	*	*	*	*	*	*	*	*	*
CIVIL ENGINEERS													
TOTAL....................	75	72	69	3	*	*	*	*	*	3	*	*	*
WHITE..................	61	61	60	1	*	*	*	*	*	*	*	*	*
BLACK..................	2	2	2	*	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	12	9	7	2	*	*	*	*	*	3	*	*	*
OTHER..................	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT.............	*	*	*	*	*	*	*	*	*	*	*	*	*
ELEC./ELECTRON. ENGINEERS													
TOTAL....................	238	215	214	1	18	16	2	3	*	*	*	*	2
WHITE..................	155	145	144	1	10	10	*	*	*	*	*	*	*
BLACK..................	13	13	13	*	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	66	55	55	*	8	6	2	3	*	*	*	*	*
OTHER..................	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT.............	4	2	2	*	*	*	*	*	*	*	*	*	2
MATERIALS SCI. ENGINEERS													
TOTAL....................	164	137	128	9	6	6	*	14	2	1	2	*	2
WHITE..................	116	94	87	7	3	3	*	14	*	1	2	*	2
BLACK..................	*	*	*	*	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	7	7	7	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	39	34	34	*	3	3	*	*	2	*	*	*	*
OTHER..................	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT.............	2	2	*	2	*	*	*	*	*	*	*	*	*
MECHANICAL ENGINEERS													
TOTAL....................	54	50	48	2	4	4	*	*	*	*	*	*	*
WHITE..................	41	37	35	2	4	4	*	*	*	*	*	*	*
BLACK..................	*	*	*	*	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	13	13	13	*	*	*	*	*	*	*	*	*	*
OTHER..................	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT.............	*	*	*	*	*	*	*	*	*	*	*	*	*
NUCLEAR ENGINEERS													
TOTAL....................	32	28	27	1	*	*	*	2	2	*	*	*	*
WHITE..................	22	20	19	1	*	*	*	*	2	*	*	*	*
BLACK..................	*	*	*	*	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	10	8	8	*	*	*	*	2	*	*	*	*	*
OTHER..................	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT.............	*	*	*	*	*	*	*	*	*	*	*	*	*
SYSTEMS DESIGN ENGINEERS													
TOTAL....................	108	103	93	10	*	*	*	*	*	3	*	*	2
WHITE..................	90	88	79	9	*	*	*	*	*	*	*	*	2
BLACK..................	*	*	*	*	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	*	*	*	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	18	15	14	1	*	*	*	*	*	3	*	*	*
OTHER..................	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT.............	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER ENGINEERS													
TOTAL....................	277	244	237	7	7	4	3	6	2	5	4	3	6
WHITE..................	225	194	190	4	7	4	3	6	2	3	4	3	6
BLACK..................	2	2	*	2	*	*	*	*	*	*	*	*	*
AM.INDIAN/ALSKN NATIVE	1	1	1	*	*	*	*	*	*	*	*	*	*
ASIAN/PACIFIC ISLANDER	47	45	44	1	*	*	*	*	*	2	*	*	*
OTHER..................	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT.............	2	2	2	*	*	*	*	*	*	*	*	*	*

* NO CASES REPORTED

SOURCE: NATIONAL SCIENCE FOUNDATION AND NATIONAL RESEARCH COUNCIL

TABLE B-21A. NUMBER OF HISPANIC WOMEN DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD AND EMPLOYMENT STATUS: 1983

FIELD	TOTAL	EMPLOYED FULL-TIME TOTAL	EMPLOYED FULL-TIME SCI/ ENG.	EMPLOYED FULL-TIME OTHER/ UNKNOWN FIELD	EMPLOYED PART-TIME TOTAL	EMPLOYED PART-TIME SCI/ ENG.	EMPLOYED PART-TIME OTHER/ UNKNOWN FIELD	POST-DOC-TORAL	UNEMP/ SEEKING EMP.	UNEMP/ NOT SEEKING EMP.	RE-TIRED	OTHER	NO REPORT
TOTAL....................	790	565	481	84	69	55	14	63	32	26	5	16	14
SCIENTISTS................	769	550	466	84	67	53	14	61	32	26	5	16	12
PHYSICAL SCIENTISTS......	77	52	48	4	5	5	*	8	4	8	*	*	*
CHEMISTS................	67	44	40	4	5	5	*	8	4	6	*	*	*
PHYSICISTS/ASTRONOMERS..	10	8	8	*	*	*	*	*	*	2	*	*	*
MATHEMATICAL SCIENTISTS..	29	19	19	*	8	5	3	*	*	2	*	*	*
MATHEMATICIANS..........	26	19	19	*	5	5	*	*	*	2	*	*	*
STATISTICIANS...........	3	*	*	*	3	*	3	*	*	*	*	*	*
COMPUTER/INFORMATION SPEC	9	9	9	*	*	*	*	*	*	*	*	*	*
ENVIRONMENTAL SCIENTISTS.	19	12	12	*	4	2	2	*	*	3	*	*	*
EARTH SCIENTISTS........	7	4	4	*	*	*	*	*	*	3	*	*	*
OCEANOGRAPHERS..........	9	7	7	*	2	2	*	*	*	*	*	*	*
ATMOSPHERIC SCIENTISTS..	3	1	1	*	2	*	2	*	*	*	*	*	*
LIFE SCIENTISTS..........	229	159	144	15	12	11	1	30	4	13	3	6	2
BIOLOGICAL SCIENTISTS...	130	88	80	8	5	5	*	19	3	9	*	6	*
AGRICULTURAL SCIENTISTS.	21	16	12	4	*	*	*	3	*	*	*	*	2
MEDICAL SCIENTISTS......	78	55	52	3	7	6	1	8	1	4	3	*	*
PSYCHOLOGISTS............	232	163	130	33	16	15	1	19	16	*	*	10	8
SOCIAL SCIENTISTS........	174	136	104	32	22	15	7	4	8	*	2	*	2
ECONOMISTS..............	40	30	30	*	5	5	*	*	5	*	*	*	*
SOCIOLOGISTS/ANTHRO.....	44	37	34	3	4	2	2	*	3	*	*	*	*
OTHER SOCIAL SCIENTISTS.	90	69	40	29	13	8	5	4	*	*	2	*	2
ENGINEERS................	21	15	15	*	2	2	*	2	*	*	*	*	2
AERO/ASTRO ENGINEERS.....	*	*	*	*	*	*	*	*	*	*	*	*	*
CHEMICAL ENGINEERS.......	3	3	3	*	*	*	*	*	*	*	*	*	*
CIVIL ENGINEERS..........	*	*	*	*	*	*	*	*	*	*	*	*	*
ELEC./ELECTRON. ENGINEERS	8	4	4	*	2	2	*	*	*	*	*	*	2
MATERIALS SCI. ENGINEERS.	3	1	1	*	*	*	*	2	*	*	*	*	*
MECHANICAL ENGINEERS.....	*	*	*	*	*	*	*	*	*	*	*	*	*
NUCLEAR ENGINEERS........	*	*	*	*	*	*	*	*	*	*	*	*	*
SYSTEMS DESIGN ENGINEERS.	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER ENGINEERS..........	7	7	7	*	*	*	*	*	*	*	*	*	*

* NO CASES REPORTED

SOURCE: NATIONAL SCIENCE FOUNDATION

BEST COPY AVAILABLE

TABLE B-22. NUMBER OF EMPLOYED WOMEN DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD AND TYPE OF EMPLOYER: 1983

FIELD	TOTAL EMPL	BUSINESS/ INDUSTRY	EDUCATIONAL INSTITUTIONS				HOSPITAL/ CLINIC	NON-PROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NO REPORT
			TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL								
TOTAL..................	48,826	10,191	29,316	26,966	1,153	1,197	2,569	2,344	2,455	59	1,037	644	74	137
SCIENTISTS................	47,750	9,558	29,000	26,658	1,145	1,197	2,569	2,318	2,382	53	1,025	639	71	135
PHYSICAL SCIENTISTS......	4,175	1,427	2,152	1,873	181	98	41	193	276	*	44	17	*	25
CHEMISTS................	3,451	1,242	1,731	1,477	166	88	38	155	207	*	41	15	*	22
PHYSICISTS/ASTRONOMERS..	724	185	421	396	15	10	3	38	69	*	3	2	*	3
MATHEMATICAL SCIENTISTS..	1,415	158	1,165	1,077	49	39	*	33	56	*	3	*	*	*
MATHEMATICIANS..........	1,118	96	961	873	49	39	*	24	34	*	3	*	*	*
STATISTICIANS...........	297	62	204	204	*	*	*	9	22	*	*	*	*	*
COMPUTER/INFORMATION SPEC	1,266	739	354	331	15	8	8	30	32	*	78	23	*	2
ENVIRONMENTAL SCIENTISTS.	914	270	388	375	13	*	*	52	162	*	34	4	*	4
EARTH SCIENTISTS........	637	241	229	218	11	*	*	15	119	*	25	4	*	4
OCEANOGRAPHERS..........	187	13	114	112	2	*	*	25	28	*	7	*	*	*
ATMOSPHERIC SCIENTISTS..	90	16	45	45	*	*	*	12	15	*	2	*	*	*
LIFE SCIENTISTS..........	16,229	1,852	11,457	10,977	359	121	842	717	905	41	262	133	1	19
BIOLOGICAL SCIENTISTS...	10,626	1,008	7,930	7,539	303	88	274	575	652	7	127	42	*	11
AGRICULTURAL SCIENTISTS.	660	221	329	329	*	*	3	22	70	*	15	*	*	*
MEDICAL SCIENTISTS......	4,943	623	3,198	3,109	56	33	565	120	183	34	120	91	1	8
PSYCHOLOGISTS............	13,683	4,080	6,406	5,272	317	817	1,602	666	206	3	304	360	*	56
SOCIAL SCIENTISTS........	10,068	1,032	7,078	6,753	211	114	76	627	745	9	300	102	70	29
ECONOMISTS..............	1,429	213	888	886	2	*	15	29	209	5	27	15	26	2
SOCIOLOGISTS/ANTHRO.....	3,490	281	2,866	2,718	70	78	37	146	91	*	36	7	26	*
OTHER SOCIAL SCIENTISTS.	5,149	538	3,324	3,149	139	36	24	452	445	4	237	80	18	27
ENGINEERS.................	1,076	633	316	308	8	*	*	26	73	6	12	5	3	2
AERO/ASTRO ENGINEERS.....	70	45	12	12	*	*	*	2	10	*	*	1	*	*
CHEMICAL ENGINEERS.......	97	67	28	28	*	*	*	*	*	2	*	*	*	*
CIVIL ENGINEERS..........	72	31	26	26	*	*	*	*	9	*	1	4	1	*
ELEC./ELECTRON. ENGINEERS	236	160	58	57	1	*	*	6	9	*	3	*	*	*
MATERIALS SCI. ENGINEERS.	157	93	49	49	*	*	*	2	13	*	*	*	*	*
MECHANICAL ENGINEERS.....	54	17	31	28	3	*	*	2	4	*	*	*	*	*
NUCLEAR ENGINEERS........	30	15	9	9	*	*	*	*	4	*	*	*	2	*
SYSTEMS DESIGN ENGINEERS.	103	65	22	22	*	*	*	7	9	*	*	*	*	*
OTHER ENGINEERS..........	257	140	81	77	4	*	*	7	15	4	8	*	*	2

* NO CASES REPORTED

SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE B-23. NUMBER OF EMPLOYED WOMEN DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD AND PRIMARY WORK ACTIVITY: 1983

FIELD	TOTAL EMPL.	RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN							
		TOTAL	BASIC RE-SEARCH	APPL'D RE-SEARCH	DEVEL-OPMENT	TOTAL	OF R&D	OF OTHER	TEACH-ING	CON-SULT-ING	SALES/PROF. SER-VICES	OTHER	NO REPORT
TOTAL....................	48,826	14,638	9,146	4,250	1,242	5,233	1,385	3,848	15,536	1,169	7,955	3,165	1,130
SCIENTISTS................	47,750	14,046	9,046	4,012	988	5,091	1,274	3,817	15,360	1,147	7,937	3,050	1,119
PHYSICAL SCIENTISTS......	4,175	1,941	1,091	655	195	438	256	182	1,202	36	140	317	101
CHEMISTS................	3,451	1,556	834	551	171	363	216	147	1,011	30	130	284	77
PHYSICISTS/ASTRONOMERS..	724	385	257	104	24	75	40	35	191	6	10	33	24
MATHEMATICAL SCIENTISTS..	1,415	275	121	102	52	78	18	60	920	53	20	38	31
MATHEMATICIANS..........	1,118	185	91	62	32	64	14	50	777	35	13	18	26
STATISTICIANS...........	297	90	30	40	20	14	4	10	143	18	7	20	5
COMPUTER/INFORMATION SPEC	1,266	479	47	87	345	232	110	122	177	58	82	197	41
ENVIRONMENTAL SCIENTISTS.	914	427	285	118	24	118	64	54	167	61	21	105	15
EARTH SCIENTISTS........	637	239	122	95	22	72	24	48	144	52	19	96	15
OCEANOGRAPHERS..........	187	116	107	7	2	38	34	4	13	9	2	9	*
ATMOSPHERIC SCIENTISTS..	90	72	56	16	*	8	6	2	10	*	*	*	*
LIFE SCIENTISTS..........	16,229	7,593	6,101	1,258	234	1,530	403	1,127	4,453	254	1,034	1,009	356
BIOLOGICAL SCIENTISTS...	10,626	5,890	5,105	660	125	610	201	409	3,006	108	234	510	268
AGRICULTURAL SCIENTISTS.	660	286	114	148	24	83	46	37	103	8	34	109	37
MEDICAL SCIENTISTS......	4,943	1,417	882	450	85	837	156	681	1,344	138	766	390	51
PSYCHOLOGISTS............	13,683	1,354	646	634	74	1,196	133	1,063	3,450	495	6,376	481	331
SOCIAL SCIENTISTS........	10,068	1,977	755	1,158	64	1,499	290	1,209	4,991	190	264	903	244
ECONOMISTS..............	1,429	390	83	302	5	149	34	115	670	107	27	81	5
SOCIOLOGISTS/ANTHRO.....	3,490	669	314	351	4	355	42	313	2,075	20	84	218	69
OTHER SOCIAL SCIENTISTS.	5,149	918	358	505	55	995	214	781	2,246	63	153	604	170
ENGINEERS................	1,076	592	100	238	254	142	111	31	176	22	18	115	11
AERO/ASTRO ENGINEERS.....	70	42	3	23	16	10	5	5	5	*	*	13	*
CHEMICAL ENGINEERS.......	97	64	17	34	13	10	10	*	10	2	5	2	4
CIVIL ENGINEERS..........	72	29	*	6	23	2	*	2	22	3	5	11	*
ELEC./ELECTRON. ENGINEERS	236	133	10	63	60	35	30	5	32	2	1	29	4
MATERIALS SCI. ENGINEERS.	157	97	32	48	17	29	28	1	19	1	2	9	*
MECHANICAL ENGINEERS.....	54	15	2	5	8	7	5	2	26	*	*	6	*
NUCLEAR ENGINEERS........	30	14	*	11	3	6	6	*	3	*	2	5	*
SYSTEMS DESIGN ENGINEERS.	103	68	1	9	58	8	8	*	10	6	*	8	3
OTHER ENGINEERS..........	257	130	35	39	56	35	19	16	49	8	3	32	*

* NO CASES REPORTED

SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE B-24. NUMBER OF EMPLOYED WOMEN DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD AND YEARS OF PROFESSIONAL EXPERIENCE: 1983

FIELD	TOTAL	YEARS OF PROFESSIONAL EXPERIENCE 1 OR LESS YEARS	2-4 YEARS	5-9 YEARS	10-14 YEARS	15-19 YEARS	20-24 YEARS	25-29 YEARS	30-34 YEARS	35-39 YEARS	40 OR MORE YEARS	NO REPORT
TOTAL..................	48,826	1,201	7,673	12,350	8,712	4,787	3,018	1,706	1,133	611	430	7,205
SCIENTISTS................	47,750	1,156	7,447	12,013	8,542	4,692	2,992	1,686	1,126	608	427	7,061
PHYSICAL SCIENTISTS......	4,175	120	775	930	623	413	266	149	118	100	55	626
CHEMISTS................	3,451	104	634	758	509	330	227	127	99	88	50	525
PHYSICISTS/ASTRONOMERS..	724	16	141	172	114	83	39	22	19	12	5	101
MATHEMATICAL SCIENTISTS..	1,415	17	162	343	256	134	117	63	45	27	14	237
MATHEMATICIANS..........	1,118	13	104	248	208	121	85	59	40	27	10	203
STATISTICIANS...........	297	4	58	95	48	13	32	4	5	*	4	34
COMPUTER/INFORMATION SPEC	1,266	6	168	318	350	131	44	30	19	5	*	195
ENVIRONMENTAL SCIENTISTS.	914	31	163	305	132	69	49	30	16	3	9	107
EARTH SCIENTISTS........	637	14	120	204	103	48	30	27	14	3	1	73
OCEANOGRAPHERS..........	187	10	30	61	24	9	17	1	*	*	7	28
ATMOSPHERIC SCIENTISTS..	90	7	13	40	5	12	2	2	2	*	1	6
LIFE SCIENTISTS..........	16,229	577	2,827	3,741	2,808	1,547	1,190	628	415	240	142	2,114
BIOLOGICAL SCIENTISTS...	10,626	396	2,015	2,602	1,864	947	693	343	236	134	102	1,294
AGRICULTURAL SCIENTISTS.	660	41	192	202	52	38	27	7	2	5	*	94
MEDICAL SCIENTISTS......	4,943	140	620	937	892	562	470	278	177	101	40	726
PSYCHOLOGISTS............	13,683	253	2,142	3,920	2,298	1,216	831	446	313	133	123	2,008
SOCIAL SCIENTISTS........	10,068	152	1,210	2,456	2,075	1,182	495	340	200	100	84	1,774
ECONOMISTS..............	1,429	3	179	351	316	183	59	42	53	26	25	192
SOCIOLOGISTS/ANTHRO.....	3,490	112	446	779	637	467	190	99	56	37	36	631
OTHER SOCIAL SCIENTISTS.	5,149	37	585	1,326	1,122	532	246	199	91	37	23	951
ENGINEERS.................	1,076	45	226	337	170	95	26	20	7	3	3	144
AERO/ASTRO ENGINEERS.....	70	*	9	24	7	13	1	6	*	2	*	8
CHEMICAL ENGINEERS........	97	4	24	30	9	4	2	3	*	*	*	21
CIVIL ENGINEERS..........	72	*	32	12	8	4	4	1	*	*	*	11
ELEC./ELECTRON. ENGINEERS	236	24	63	38	41	20	4	1	2	*	3	40
MATERIALS SCI. ENGINEERS.	157	4	25	70	16	19	6	2	4	*	*	11
MECHANICAL ENGINEERS.....	54	5	9	16	7	4	2	4	1	1	*	5
NUCLEAR ENGINEERS........	30	*	4	9	7	4	*	*	*	*	*	6
SYSTEMS DESIGN ENGINEERS.	103	*	21	32	20	10	2	2	*	*	*	16
OTHER ENGINEERS..........	257	8	39	106	55	17	5	1	*	*	*	26

* NO CASES REPORTED

SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE B-25. MEDIAN ANNUAL SALARIES OF WOMEN DOCTORAL SCIENTISTS
AND ENGINEERS BY FIELD AND RACIAL/ETHNIC GROUP: 1983

FIELD	TOTAL	RACE WHITE	BLACK	AMERICAN INDIAN	ASIAN	OTHER	HISPANIC ETHNICITY
TOTAL..................	$31,700	$31,700	$31,800	**	$32,900	**	$30,800
SCIENTISTS...............	31,500	31,500	31,500	**	32,000	**	30,600
PHYSICAL SCIENTISTS......	35,200	35,300	36,500	**	34,700	**	**
CHEMISTS................	34,700	34,800	36,300	**	34,200	**	**
PHYSICISTS/ASTRONOMERS..	37,400	37,100	**	**	40,100	**	**
MATHEMATICAL SCIENTISTS..	32,200	31,700	**	**	34,000	**	**
MATHEMATICIANS..........	31,600	31,200	**	**	33,500	**	**
STATISTICIANS...........	34,400	34,000	**	**	**	**	**
COMPUTER/INFORMATION SPEC	33,400	33,200	**	**	37,200	**	**
ENVIRONMENTAL SCIENTISTS.	35,300	35,400	**	**	**	**	**
EARTH SCIENTISTS........	36,300	36,400	**	**	**	**	**
OCEANOGRAPHERS..........	31,600	31,300	**	**	**	**	**
ATMOSPHERIC SCIENTISTS..	34,000	34,200	**	**	**	**	**
LIFE SCIENTISTS..........	31,200	31,300	32,600	**	30,500	**	30,500
BIOLOGICAL SCIENTISTS...	30,800	30,900	31,800	**	30,300	**	31,000
AGRICULTURAL SCIENTISTS.	29,100	29,000	**	**	**	**	**
MEDICAL SCIENTISTS......	32,700	32,600	35,300	**	32,600	**	**
PSYCHOLOGISTS............	30,800	30,800	30,400	**	32,100	**	29,500
SOCIAL SCIENTISTS........	30,700	30,900	30,500	**	30,000	**	33,200
ECONOMISTS..............	34,600	35,000	**	**	**	**	**
SOCIOLOGISTS/ANTHRO.....	29,800	29,900	28,600	**	**	**	**
OTHER SOCIAL SCIENTISTS.	30,800	30,900	32,500	**	26,400	**	30,600
ENGINEERS................	39,200	37,800	**	**	41,100	**	**
AERO/ASTRO ENGINEERS.....	41,800	42,100	**	**	**	**	**
CHEMICAL ENGINEERS.......	40,100	42,200	**	**	**	**	**
CIVIL ENGINEERS..........	29,300	**	**	**	**	**	**
ELEC./ELECTRON. ENGINEERS	40,000	38,100	**	**	**	**	**
MATERIALS SCI. ENGINEERS.	39,700	37,700	**	**	**	**	**
MECHANICAL ENGINEERS.....	36,200	**	**	**	**	**	**
NUCLEAR ENGINEERS........	**	**	**	**	**	**	**
SYSTEMS DESIGN ENGINEERS.	41,600	41,600	**	**	**	**	**
OTHER ENGINEERS..........	35,500	35,500	**	**	**	**	**

** NO MEDIAN COMPUTED FOR GROUPS WITH FEWER THAN 20 INDIVIDUALS REPORTING SALARY

NOTE: MEDIAN SALARIES COMPUTED ONLY FOR FULL-TIME EMPLOYED CIVILIANS. HISPANICS INCLUDE ALL RACES.

SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE B-26. MEDIAN ANNUAL SALARIES OF WOMEN DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD AND TYPE OF EMPLOYER: 1983

FIELD	TOTAL EMPL	BUSINESS/ INDUSTRY	EDUCATIONAL INSTITUTIONS			ELEM/ SEC. SCHOOL	HOSPITAL/ CLINIC	NON-PROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NO REPORT
			TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL									
TOTAL....................	$31,700	$38,900	$30,200	$30,100	$30,900	$31,200	$30,900	$31,900	$37,500	**	$29,500	$30,300	**	**
SCIENTISTS................	31,500	38,300	30,100	30,100	30,900	31,200	30,900	31,500	37,500	**	29,700	30,400	**	**
PHYSICAL SCIENTISTS......	35,200	39,500	29,600	29,500	31,900	24,800	**	37,500	38,200	**	**	**	**	**
CHEMISTS................	34,700	39,400	28,200	27,700	32,000	22,900	**	37,200	36,600	**	**	**	**	**
PHYSICISTS/ASTRONOMERS..	37,400	39,900	34,500	34,800	**	**	**	**	42,200	**	**	**	**	**
MATHEMATICAL SCIENTISTS..	32,200	40,300	30,700	30,600	**	**	**	**	**	**	**	**	**	**
MATHEMATICIANS..........	31,600	42,300	30,700	30,700	**	**	**	**	**	**	**	**	**	**
STATISTICIANS...........	34,400	37,600	30,200	30,200	**	**	**	**	**	**	**	**	**	**
COMPUTER/INFORMATION SPEC	33,400	34,400	35,000	33,500	**	**	**	**	**	**	**	**	**	**
ENVIRONMENTAL SCIENTISTS.	35,300	38,300	31,100	31,200	**	**	**	**	37,500	**	**	**	**	**
EARTH SCIENTISTS........	36,300	38,400	30,800	30,800	**	**	**	**	37,700	**	**	**	**	**
OCEANOGRAPHERS..........	31,600	**	30,800	31,000	**	**	**	**	**	**	**	**	**	**
ATMOSPHERIC SCIENTISTS..	34,000	**	**	**	**	**	**	**	**	**	**	**	**	**
LIFE SCIENTISTS..........	31,200	36,300	30,200	30,300	30,700	23,700	32,100	32,100	36,600	**	35,700	32,200	**	**
BIOLOGICAL SCIENTISTS...	30,800	36,400	29,900	30,000	30,000	**	30,800	32,900	37,100	**	32,300	**	**	**
AGRICULTURAL SCIENTISTS.	29,100	29,700	27,600	27,600	**	**	**	**	**	**	**	**	**	**
MEDICAL SCIENTISTS......	32,700	37,700	31,700	31,600	**	**	32,600	30,100	35,900	**	36,600	**	**	**
PSYCHOLOGISTS............	30,800	40,600	29,500	28,900	30,100	33,700	30,700	28,800	40,900	**	28,600	29,000	**	**
SOCIAL SCIENTISTS........	30,700	34,200	30,200	30,200	29,900	**	**	30,700	37,300	**	28,000	**	**	**
ECONOMISTS..............	34,600	40,200	31,600	31,600	**	**	**	**	42,500	**	**	**	**	**
SOCIOLOGISTS/ANTHRO.....	29,[illegible]00	**	29,700	29,800	**	**	**	**	**	**	**	**	**	**
OTHER SOCIAL SCIENTISTS.	30,800	30,600	30,400	30,300	30,500	**	**	32,000	37,400	**	26,700	**	**	**
ENGINEERS................	39,200	41,400	35,000	35,000	**	**	**	**	35,700	**	**	**	**	**
AERO/ASTRO ENGINEERS.....	41,800	**	**	**	**	**	**	**	**	**	**	**	**	**
CHEMICAL ENGINEERS.......	40,100	42,500	**	**	**	**	**	**	**	**	**	**	**	**
CIVIL ENGINEERS..........	29,300	**	**	**	**	**	**	**	**	**	**	**	**	**
ELEC./ELECTRON. ENGINEERS	40,000	42,000	34,500	34,500	**	**	**	**	**	**	**	**	**	**
MATERIALS SCI. ENGINEERS.	39,700	43,500	**	**	**	**	**	**	**	**	**	**	**	**
MECHANICAL ENGINEERS.....	36,200	**	**	**	**	**	**	**	**	**	**	**	**	**
NUCLEAR ENGINEERS........	**	**	**	**	**	**	**	**	**	**	**	**	**	**
SYSTEMS DESIGN ENGINEERS.	41,600	41,900	**	**	**	**	**	**	**	**	**	**	**	**
OTHER ENGINEERS..........	35,500	39,200	34,700	34,600	**	**	**	**	**	**	**	**	**	**

** NO MEDIAN COMPUTED FOR GROUPS WITH FEWER THAN 20 INDIVIDUALS REPORTING SALARY

NOTE: MEDIAN SALARIES COMPUTED ONLY FOR FULL-TIME EMPLOYED CIVILIANS

SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE B-27. MEDIAN ANNUAL SALARIES OF WOMEN DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD AND PRIMARY WORK ACTIVITY: 1983

FIELD	TOTAL EMPL	RESEARCH AND DEVELOPMENT				MANAGEMENT OR ADMIN			TEACHING	CONSULTING	SALES/PROF SERVICES	OTHER	NO REPORT
		TOTAL	BASIC RESEARCH	APPL'D RESEARCH	DEVELOPMENT	TOTAL	OF R&D	OF OTHER					
TOTAL.....	$31,700	$32,800	$30,800	$35,300	$35,700	$37,800	$41,400	$36,400	$29,700	$35,700	$31,300	32,700	28,400
SCIENTISTS.....	31,500	32,500	30,800	35,000	35,100	37,500	40,700	36,[illegible]	29,600	35,500	31,300	32,600	28,400
PHYSICAL SCIENTISTS......	35,200	36,400	35,000	37,600	36,200	41,500	43,500	37,000	28,200	**	36,000	36,400	**
CHEMISTS...............	34,700	37,[illegible]00	34,000	37,200	36,100	40,900	43,300	35,100	26,900	**	34,800	36,700	**
PHYSICISTS/ASTRONOMERS..	37,400	3[illegible],300	37,500	39,200	**	45,100	45,500	**	31,800	**	**	**	**
MATHEMATICAL SCIENTISTS..	32,200	34,900	28,200	40,000	**	37,500	**	36,900	30,400	**	**	**	**
MATHEMATICIANS..........	31,600	[illegible]1,400	30,600	37,100	**	37,000	**	37,000	30,300	**	**	**	**
STATISTICIANS...........	34,400	27,500	**	**	**	**	**	**	31,000	**	**	**	**
COMPUTER/INFORMATION SPEC	33,400	34,500	37,000	45,500	33,600	40,400	40,200	40,500	33,500	**	**	24,600	**
ENVIRONMENTAL SCIENTISTS.	35,300	34,500	33,400	38,000	**	44,800	45,200	**	29,500	**	**	35,400	**
EARTH SCIENTISTS........	36,300	37,000	36,600	38,700	**	47,200	**	**	29,000	**	**	35,400	**
OCEANOGRAPHERS..........	31,600	31,700	31,800	**	**	**	**	**	**	**	**	**	**
ATMOSPHERIC SCIENTISTS..	34,000	33,500	**	**	**	**	**	**	**	**	**	**	**
LIFE SCIENTISTS..........	31,200	30,700	30,100	33,700	35,700	38,300	40,600	37,100	30,100	36,200	30,100	32,300	**
BIOLOGICAL SCIENTISTS...	30,800	30,700	30,200	34,800	37,000	41,100	43,000	39,100	29,800	32,000	30,400	35,200	**
AGRICULTURAL SCIENTISTS.	29,100	28,400	27,500	28,700	**	35,400	**	**	29,000	**	**	**	**
MEDICAL SCIENTISTS......	32,700	32,400	30,100	35,200	**	37,200	39,200	36,900	30,700	37,100	29,800	32,100	**
PSYCHOLOGISTS.....	30,800	30,600	30,100	32,300	**	35,100	43,500	34,000	2[illegible],800	35,000	31,500	39,500	**
SOCIAL SCIENTISTS........	30,700	32,300	30,900	32,600	**	36,900	37,300	36,200	29,400	35,800	35,200	30,600	**
ECONOMISTS.............	34,600	35,600	**	35,900	**	50,300	**	42,800	30,600	**	**	**	**
SOCIOLOGISTS/ANTHRO.....	29,800	31,700	34,500	31,400	**	36,300	**	33,500	29,100	**	**	**	**
OTHER SOCIAL SCIENTISTS.	30,800	31,600	27,900	32,300	**	35,800	36,500	35,600	29,500	**	**	30,600	**
ENGINEERS.................	39,200	39,200	35,200	41,300	38,700	47,400	48,500	**	34,100	**	**	34,500	**
AERO/ASTRO ENGINEERS.....	41,800	**	**	**	**	**	**	**	**	**	**	**	**
CHEMICAL ENGINEERS.......	40,100	39,500	**	**	**	**	**	**	**	**	**	**	**
CIVIL ENGINEERS..........	29,300	**	**	**	**	**	**	**	**	**	**	**	**
ELEC./ELECTRON. ENGINEERS	40,000	40,300	**	43,200	**	**	**	**	**	**	**	**	**
MATERIALS SCI. ENGINEERS.	39,700	39,200	**	41,500	**	**	**	**	**	**	**	**	**
MECHANICAL ENGINEERS.....	36,200	**	**	**	**	**	**	**	**	**	**	**	**
NUCLEAR ENGINEERS........	**	**	**	**	**	**	**	**	**	**	**	**	**
SYSTEMS DESIGN ENGINEERS.	41,600	41,[illegible]00	**	**	[illegible]	**	**	**	**	**	**	**	**
OTHER ENGINEERS..........	35,500	35,000	**	**	**	**	**	**	34,500	**	**	**	**

** NO MEDIAN COMPUTED FOR GROUPS WITH FEWER THAN 20 INDIVIDUALS REPORTING SALARY

NOTE: MEDIAN SALARIES COMPUTED ONLY FOR FULL-TIME EMPLOYED CIVILIANS

SOURCE: NATIONAL SCIENCE FOUNDATION

BEST COPY AVAILABLE

TABLE B-28. MEDIAN ANNUAL SALARIES OF WOMEN DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD AND YEARS OF PROFESSIONAL EXPERIENCE: 1983

		YEARS OF PROFESSIONAL EXPERIENCE										
FIELD	TOTAL	1 OR LESS YEARS	3-4 YEARS	5-9 YEARS	10-14 YEARS	15-19 YEARS	20-24 YEARS	25-29 YEARS	30-34 YEARS	35-39 YEARS	40 OR MORE YEARS	NO REPORT
TOTAL	$31,700	$23,600	$25,800	$29,700	$33,200	$35,400	$37,400	$38,900	$40,900	$43,000	$42,500	$32,100
SCIENTISTS................	31,500	22,600	25,600	29,400	33,100	35,200	37,400	38,700	40,900	42,000	42,400	31,800
PHYSICAL SCIENTISTS......	35,200	32,300	31,900	32,600	36,300	36,300	36,500	42,400	44,600	44,200	**	36,800
CHEMISTS................	34,700	**	31,700	[illegible]	36,200	35,400	36,400	39,600	44,200	29,500	**	36,900
PHYSICISTS/ASTRONOMERS..	37,400	**	36,200	35,100	37,800	40,300	36,800	**	**	**	**	**
MATHEMATICAL SCIENTISTS..	32,200	**	25,600	29,900	33,600	34,000	36,300	38,100	42,700	**	**	34,300
MATHEMATICIANS..........	31,600	**	24,000	29,100	34,200	32,500	34,800	38,100	**	**	**	32,900
STATISTICIANS...........	34,400	**	**	36,500	**	**	**	**	**	**	**	**
COMPUTER/INFORMATION SPEC	33,400	**	33,400	31,800	32,600	36,500	**	**	**	**	**	30,200
ENVIRONMENTAL SCIENTISTS.	35,300	**	29,200	33,900	34,000	35,500	**	**	**	**	**	37,500
EARTH SCIENTISTS.........	36,300	**	29,200	36,500	35,500	36,800	**	**	**	**	**	**
OCEANOGRAPHERS..........	31,600	**	**	**	**	**	**	**	**	**	**	**
ATMOSPHERIC SCIENTISTS..	34,000	**	**	**	**	**	**	**	**	**	**	**
LIFE SCIENTISTS..........	31,200	22,600	25,400	28,000	32,900	34,200	36,900	38,200	40,900	42,600	**	31,800
BIOLOGICAL SCIENTISTS...	30,800	**	24,600	27,200	32,600	34,700	36,500	35,700	40,400	42,300	**	30,400
AGRICULTURAL SCIENTISTS.	29,100	**	20,800	30,200	**	**	**	**	**	**	**	**
MEDICAL SCIENTISTS......	32,700	**	25,400	28,900	33,700	33,500	37,200	40,000	41,900	42,800	**	35,300
PSYCHOLOGISTS............	30,800	**	25,300	29,600	33,000	37,200	39,100	36,600	40,100	**	**	33,500
SOCIAL SCIENTISTS........	30,700	**	24,800	28,700	32,700	34,100	36,900	39,300	40,800	42,000	**	29,600
ECONOMISTS..............	34,600	**	**	31,300	37,600	44,500	**	**	**	**	**	35,400
SOCIOLOGISTS/ANTHRO.....	29,800	**	20,700	26,100	31,100	32,600	35,600	43,500	**	**	**	29,000
OTHER SOCIAL SCIENTISTS.	30,800	**	25,700	29,000	33,100	34,000	36,600	36,200	44,300	**	**	28,700
ENGINEERS................	39,200	**	36,000	39,700	40,500	44,400	**	**	**	**	**	41,000
AERO/ASTRO ENGINEERS.....	41,800	**	**	**	**	**	**	**	**	**	**	**
CHEMICAL ENGINEERS.......	40,100	**	**	**	**	**	**	**	**	**	**	**
CIVIL ENGINEERS..........	29,300	**	**	**	**	**	**	**	**	**	**	**
ELEC./ELECTRON. ENGINEERS	40,200	**	35,500	**	**	**	**	**	**	**	**	**
MATERIALS SCI. ENGINEERS.	39,700	**	**	40,200	**	**	**	**	**	**	**	**
MECHANICAL ENGINEERS.....	36,200	**	**	**	**	**	**	**	**	**	**	**
NUCLEAR ENGINEERS........	**	**	**	**	**	**	**	**	**	**	**	**
SYSTEMS DESIGN ENGINEERS.	41,600	**	**	**	**	**	**	**	**	**	**	**
OTHER ENGINEERS..........	35,500	**	**	35,300	32,800	**	**	**	**	**	**	**

** NO MEDIAN COMPUTED FOR GROUPS WITH FEWER THAN 20 INDIVIDUALS REPORTING SALARY

NOTE: MEDIAN SALARIES COMPUTED ONLY FOR FULL-TIME EMPLOYED CIVILIANS

SOURCE: NATIONAL SCIENCE FOUNDATION

TABLE B-29. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, SUPPORTING AGENCY, AND TYPE OF EMPLOYER: 1983

FIELD AND SUPPORTING AGENCY	TOTAL EMPL	BUSINESS/ INDUSTRY	EDUCATIONAL INSTITUTIONS				HOSPITAL/ CLINIC	NON-PROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NO REPORT
			TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL								
ALL FIELDS														
TOTAL EMPLOYED	369,320	113,463	196,050	187,554	5,421	3,075	10,435	11,894	23,793	2,090	5,142	2,575	1,002	876
TOTAL SUPPORTED	143,936	23,909	78,896	77,630	577	629	3,578	6,786	25,691	2,078	1,855	772	298	73
NASA	8,075	2,140	3,800	3,790	10	*	*	312	1,797	16	*	*	*	10
NSF	22,418	1,014	19,754	19,580	166	8	14	1,097	464	2	44	5	24	*
EPA	5,279	1,346	2,219	2,204	15	*	31	467	898	28	179	111	*	*
DOE	19,000	6,574	9,617	9,610	7	*	37	1,447	1,185	24	80	20	2	14
NRC	1,991	814	550	550	*	*	*	320	305	*	*	*	2	*
AID	2,145	427	1,445	1,445	*	*	*	297	276	*	*	*	*	*
DHHS, TOTAL	38,488	2,721	27,131	26,995	105	31	1,691	2,453	3,260	312	651	265	1	3
NIH	30,188	1,555	23,202	23,090	105	7	1,041	1,953	2,081	151	177	25	*	3
ADAMHA	4,749	486	2,720	2,720	*	*	567	295	308	*	207	166	*	*
OTHER DHHS	4,959	819	2,159	2,135	*	24	189	290	934	161	328	88	1	*
ED	3,227	222	2,701	1,984	232	485	36	170	104	*	74	20	*	*
DOD	28,570	10,857	8,227	8,209	8	10	147	1,488	6,094	1,667	49	34	*	7
COMMERCE	4,554	476	1,821	1,821	*	*	*	131	1,913	19	108	51	35	*
USDA	16,053	448	10,979	10,979	*	*	*	164	4,260	*	179	13	*	10
DOT	1,891	599	886	886	*	*	*	111	244	*	9	42	*	*
JUSTICE	793	177	341	341	*	*	*	57	142	1	64	4	*	7
HUD	539	151	132	102	30	*	61	61	68	*	23	43	*	*
INTERIOR	5,486	531	2,338	2,338	*	*	*	43	2,188	*	319	67	*	*
OTHER	10,676	1,307	3,674	3,549	125	*	1,493	353	3,234	43	235	127	188	22
SOURCE UNKNOWN	3,917	630	1,300	1,133	59	108	204	81	1,626	5	28	37	6	*
SOURCE NOT REPORTED	1,188	324	633	610	8	15	83	67	*	*	13	26	42	*
NOT SUPPORTED	190,194	79,402	97,191	91,336	4,099	1,756	5,054	4,080	*	*	2,425	1,309	606	127
SUPPORT STATUS UNKNOWN	7,912	1,324	4,968	4,243	374	351	801	224	*	*	297	266	32	*
NO REPORT	27,278	8,828	14,995	14,285	371	339	1,002	804	102	12	565	228	66	676
SCIENTISTS														
TOTAL EMPLOYED	307,775	78,963	175,730	167,305	5,350	3,075	10,428	9,973	21,950	1,666	5,048	2,286	961	770
TOTAL SUPPORTED	116,808	13,560	67,996	66,807	560	629	3,571	5,285	21,849	1,654	1,807	717	296	73
NASA	4,999	974	2,633	2,623	10	*	*	310	1,164	8	*	*	*	10
NSF	18,626	678	16,453	16,281	164	8	14	965	462	*	44	5	24	*
EPA	4,582	1,073	1,900	1,900	*	*	31	407	877	13	178	103	*	*
DOE	12,079	3,114	7,045	7,038	7	*	37	926	871	22	36	14	*	14
NRC	648	184	206	206	*	*	*	137	121	*	*	*	*	*
AID	2,001	290	1,177	1,177	*	*	*	258	276	*	*	*	*	*
DHHS, TOTAL	37,138	2,606	26,115	25,979	105	31	1,684	2,380	3,135	298	651	265	1	3
NIH	29,078	1,490	22,296	22,184	105	7	1,034	1,890	2,026	137	177	25	*	3
ADAMHA	4,710	486	2,698	2,698	*	*	560	285	308	*	207	166	*	*
OTHER DHHS	4,728	769	2,038	2,014	*	24	189	290	864	161	328	88	1	*
ED	3,061	232	2,435	1,818	152	465	36	170	104	*	74	20	*	*
DOD	16,649	4,837	5,276	5,258	8	10	147	669	4,351	1,282	46	34	*	7
COMMERCE	3,668	279	1,441	1,441	*	*	*	109	1,633	19	108	44	35	*
USDA	14,896	367	10,141	10,141	*	*	*	164	4,022	*	179	13	*	10
DOT	766	223	340	340	*	*	*	28	130	*	9	36	*	*
JUSTICE	792	177	340	340	*	*	*	57	142	1	64	4	*	7
HUD	496	129	132	102	30	*	61	55	53	*	23	43	*	*
INTERIOR	4,732	456	1,826	1,826	*	*	*	35	2,029	*	319	67	*	*
OTHER	10,134	1,228	3,423	3,298	125	*	1,493	287	3,122	43	235	93	188	22
SOURCE UNKNOWN	3,110	335	1,148	981	59	108	204	25	1,322	5	28	37	6	*
SOURCE NOT REPORTED	1,066	261	574	551	8	15	83	67	*	*	13	26	42	*
NOT SUPPORTED	160,440	57,790	89,658	83,855	4,047	1,756	5,054	3,754	*	*	2,387	1,100	572	125
SUPPORT STATUS UNKNOWN	7,300	949	4,771	4,048	372	351	801	222	*	*	289	241	27	*
NO REPORT	23,227	6,664	13,305	12,595	371	339	1,002	711	101	12	565	228	66	572
PHYSICAL SCIENTISTS														
TOTAL EMPLOYED	63,986	28,748	27,931	26,453	1,134	344	559	1,751	4,307	205	158	88	25	214
TOTAL SUPPORTED	24,720	5,035	13,732	13,601	115	16	62	1,276	4,297	205	24	40	24	25
NASA	2,806	611	1,566	1,566	*	*	*	69	560	*	*	*	*	*
NSF	5,440	401	4,742	4,685	49	8	*	220	53	*	*	*	24	*
EPA	802	188	288	288	*	*	*	127	247	*	6	26	*	*
DOE	8,023	2,098	4,907	4,907	*	*	*	475	507	22	*	14	*	*
NRC	252	87	49	49	*	*	*	69	47	*	*	*	*	*
AID	26	*	26	26	*	*	*	*	*	*	*	*	*	*
DHHS, TOTAL	3,911	320	2,949	2,914	35	*	37	289	268	45	*	*	*	3
NIH	3,532	285	2,781	2,746	35	*	31	270	152	10	*	*	*	3
ADAMHA	70	2	49	49	*	*	6	5	8	*	*	*	*	*
OTHER DHHS	339	35	140	140	*	*	*	16	113	35	*	*	*	*
ED	56	*	56	21	35	*	*	*	*	*	*	*	*	*
DOD	6,323	2,260	1,901	1,901	*	*	*	318	1,684	160	*	*	*	*
COMMERCE	638	76	102	102	*	*	*	7	444	*	9	*	*	*
USDA	537	4	215	215	*	*	*	15	297	*	6	*	*	*
DOT	85	44	5	5	*	*	*	*	34	*	2	*	*	*
JUSTICE	2	*	*	*	*	*	*	*	2	*	*	*	*	*
HUD	1	*	1	1	*	*	*	*	*	*	*	*	*	*
INTERIOR	225	50	117	117	*	*	*	2	56	*	*	*	*	*
OTHER	725	105	221	190	31	*	38	17	321	*	1	*	*	22
SOURCE UNKNOWN	400	72	62	62	*	*	*	*	266	*	*	*	*	*
SOURCE NOT REPORTED	245	129	103	95	*	8	*	13	*	*	*	*	*	*
NOT SUPPORTED	33,809	21,205	11,744	10,580	897	267	333	375	*	*	118	31	*	3
SUPPORT STATUS UNKNOWN	735	257	441	351	65	25	2	13	*	*	11	11	*	*
NO REPORT	4,722	2,251	2,014	1,921	57	36	162	87	10	*	5	6	1	186

* NO CASES REPORTED

TABLE B-29. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, SUPPORTIVE AGENCY, AND TYPE OF EMPLOYER: 1983
CONTINUED

			EDUCATIONAL INSTITUTIONS											
FIELD AND SUPPORTING AGENCY	TOTAL EMPL	BUSINESS/ INDUSTRY	TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL	HOSPITAL/ CLINIC	NON-PROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NO REPORT
CHEMISTS														
TOTAL EMPLOYED..........	41,298	22,525	15,037	13,905	901	731	398	818	2,054	95	121	72	1	177
TOTAL SUPPORTED........	10,933	2,098	6,055	5,932	115	8	54	512	2,044	95	24	26	*	25
NASA..................	758	236	399	399	*	*	*	5	118	*	*	*	*	*
NSF..................	2,379	266	2,096	2,047	49	*	*	14	3	*	*	*	*	*
EPA..................	730	144	220	220	*	*	*	110	224	*	6	26	*	*
DOE..................	2,587	972	1,253	1,253	*	*	*	151	211	*	*	*	*	*
NRC..................	65	4	2	2	*	*	*	39	20	*	*	*	*	*
AID..................	3	*	3	3	*	*	*	*	*	*	*	*	*	*
DHHS, TOTAL...........	3,561	318	2,634	2,599	35	*	29	272	268	37	*	*	*	3
NIH..................	3,190	283	2,466	2,431	35	*	23	253	152	10	*	*	*	3
ADAMHA...............	70	2	49	49	*	*	6	5	8	*	*	*	*	*
OTHER DHHS............	331	35	140	140	*	*	*	16	113	27	*	*	*	*
ED..................	51	*	51	16	35	*	*	*	*	*	*	*	*	*
DOD..................	2,031	629	703	703	*	*	*	111	530	58	*	*	*	*
COMMERCE..............	280	76	50	50	*	*	*	5	140	*	9	*	*	*
USDA..................	509	4	107	107	*	*	*	15	297	*	6	*	*	*
DOT..................	38	*	2	2	*	*	*	*	34	*	2	*	*	*
JUSTICE..............	2	*	*	*	*	*	*	*	2	*	*	*	*	*
HUD..................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
INTERIOR..............	151	50	71	71	*	*	*	*	30	*	*	*	*	*
OTHER................	362	13	79	48	31	*	38	*	209	*	1	*	*	22
SOURCE UNKNOWN........	162	34	7	7	*	*	*	*	121	*	*	*	*	*
SOURCE NOT REPORTED...	108	83	25	17	*	8	*	*	*	*	*	*	*	*
NOT SUPPORTED..........	26,567	18,534	7,447	6,598	684	165	215	253	*	*	84	31	*	3
SUPPORT STATUS UNKNOWN.	640	232	375	302	48	25	1	10	*	*	11	11	*	*
NO REPORT..............	3,158	1,661	1,160	1,073	54	33	128	43	10	*	2	4	1	149
PHYSICISTS/ASTRONOMERS														
TOTAL EMPLOYED..........	22,688	6,223	12,894	12,548	233	113	161	933	2,253	110	37	16	24	37
TOTAL SUPPORTED........	13,787	2,937	7,677	7,669	*	8	8	764	2,253	110	*	14	24	*
NASA..................	2,048	375	1,167	1,167	*	*	*	64	442	*	*	*	*	*
NSF..................	3,061	135	2,646	2,638	*	8	*	206	50	*	*	*	24	*
EPA..................	152	44	68	68	*	*	*	17	23	*	*	*	*	*
DOE..................	5,436	1,126	3,654	3,654	*	*	*	324	296	22	*	14	*	*
NRC..................	187	83	47	47	*	*	*	30	27	*	*	*	*	*
AID..................	23	*	23	23	*	*	*	*	*	*	*	*	*	*
DHHS, TOTAL...........	350	2	315	315	*	*	8	17	*	8	*	*	*	*
NIH..................	342	2	315	315	*	*	8	17	*	*	*	*	*	*
ADAMHA...............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER DHHS............	8	*	*	*	*	*	*	*	*	8	*	*	*	*
ED..................	5	*	5	5	*	*	*	*	*	*	*	*	*	*
DOD..................	4,292	1,631	1,198	1,198	*	*	*	207	1,154	102	*	*	*	*
COMMERCE..............	358	*	52	52	*	*	*	2	304	*	*	*	*	*
USDA..................	28	*	28	28	*	*	*	*	*	*	*	*	*	*
DOT..................	47	44	3	3	*	*	*	*	*	*	*	*	*	*
JUSTICE..............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HUD..................	1	*	1	1	*	*	*	*	*	*	*	*	*	*
INTERIOR..............	74	*	46	46	*	*	*	2	26	*	*	*	*	*
OTHER................	363	92	142	142	*	*	*	17	112	*	*	*	*	*
SOURCE UNKNOWN........	238	38	55	55	*	*	*	*	145	*	*	*	*	*
SOURCE NOT REPORTED...	137	46	78	78	*	*	*	13	*	*	*	*	*	*
NOT SUPPORTED..........	7,242	2,671	4,297	3,982	213	102	118	122	*	*	34	*	*	*
SUPPORT STATUS UNKNOWN.	95	25	66	49	17	*	1	3	*	*	*	*	*	*
NO REPORT..............	1,564	590	854	848	3	3	34	44	*	*	3	2	*	37
MATHEMATICAL SCIENTISTS														
TOTAL EMPLOYED..........	16,379	2,027	13,244	12,770	318	156	*	211	790	33	21	*	*	53
TOTAL SUPPORTED........	4,791	595	3,307	3,273	5	29	*	63	782	30	*	*	*	14
NASA..................	211	71	115	115	*	*	*	*	25	*	*	*	*	*
NSF..................	2,070	*	2,006	2,004	2	*	*	2	62	*	*	*	*	*
EPA..................	21	*	6	6	*	*	*	15	*	*	*	*	*	*
DOE..................	387	164	170	170	*	*	*	24	15	*	*	*	*	14
NRC..................	15	1	13	13	*	*	*	1	*	*	*	*	*	*
AID..................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DHHS, TOTAL...........	223	12	139	139	*	*	*	26	46	*	*	*	*	*
NIH..................	126	10	111	111	*	*	*	5	*	*	*	*	*	*
ADAMHA...............	29	*	27	27	*	*	*	2	*	*	*	*	*	*
OTHER DHHS............	73	2	4	4	*	*	*	21	46	*	*	*	*	*
ED..................	107	*	79	62	3	14	*	*	28	*	*	*	*	*
DOD..................	1,513	409	739	739	*	*	[illegible]	20	315	30	*	*	*	*
COMMERCE..............	117	14	19	19	*	*	*	*	84	*	*	*	*	*
USDA..................	75	*	52	52	*	*	*	6	17	*	*	*	*	*
DOT..................	70	14	38	38	*	*	*	*	18	*	*	*	*	*
JUSTICE..............	43	*	40	40	*	*	*	*	3	*	*	*	*	*
HUD..................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
INTERIOR..............	64	*	58	58	*	*	*	*	6	*	*	*	*	*
OTHER................	209	32	88	88	*	*	*	*	89	*	*	*	*	*
SOURCE UNKNOWN........	215	14	75	60	*	15	*	*	126	*	*	*	*	*
SOURCE NOT REPORTED...	31	15	14	14	*	*	*	2	*	*	*	*	*	*
NOT SUPPORTED..........	9,570	1,102	8,345	7,984	270	91	*	96	*	*	14	*	*	13
SUPPORT STATUS UNKNOWN.	433	48	382	364	4	14	*	3	*	*	*	*	*	*
NO REPORT..............	1,585	282	1,210	1,149	39	22	*	49	8	1	7	*	*	26

* NO CASES REPORTED

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TABLE B-29. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, SUPPORTING AGENCY, AND TYPE OF EMPLOYER: 1983
CONTINUED

FIELD AND SUPPORTING AGENCY	TOTAL EMPL	BUSINESS/ INDUSTRY	EDUCATIONAL INSTITUTIONS TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL	HOSPITAL/ CLINIC	NON-PROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NO REPORT
MATHEMATICIANS														
TOTAL EMPLOYED..........	13,589	1,512	11,365	10,891	318	156	*	106	499	33	21	*	*	53
TOTAL SUPPORTED........	3,627	419	2,644	2,610	5	29	*	21	499	30	*	*	*	14
NASA..................	150	38	98	98	*	*	*	*	14	*	*	*	*	*
NSF...................	1,862	*	1,798	1,796	2	*	*	2	62	*	*	*	*	*
EPA...................	6	*	6	6	*	*	*	*	*	*	*	*	*	*
DOE...................	208	63	110	110	*	*	*	8	13	*	*	*	*	14
NRC...................	14	1	13	13	*	*	*	*	*	*	*	*	*	*
AID...................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DHHS, TOTAL...........	108	8	80	80	*	*	*	*	20	*	*	*	*	*
NIH..................	84	8	76	76	*	*	*	*	*	*	*	*	*	*
ADAMHA...............	3	*	3	3	*	*	*	*	*	*	*	*	*	*
OTHER DHHS...........	24	*	4	4	*	*	*	*	20	*	*	*	*	*
ED....................	63	*	63	46	3	14	*	*	*	*	*	*	*	*
DOD...................	1,126	338	520	520	*	*	*	17	221	30	*	*	*	*
COMMERCE..............	68	14	12	12	*	*	*	*	42	*	*	*	*	*
USDA..................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DOT...................	39	12	23	23	*	*	*	*	4	*	*	*	*	*
JUSTICE...............	2	*	2	2	*	*	*	*	*	*	*	*	*	*
HUD...................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
INTERIOR..............	14	*	10	10	*	*	*	*	4	*	*	*	*	*
OTHER.................	163	32	76	76	*	*	*	*	55	*	*	*	*	*
SOURCE UNKNOWN........	142	14	64	[illegible]	*	15	*	*	64	*	*	*	*	*
SOURCE NOT REPORTED...	31	15	14	14	*	*	*	2	*	*	*	*	*	*
NOT SUPPORTED..........	8,230	831	7,303	6,942	270	91	*	69	*	*	14	*	*	13
SUPPORT STATUS UNKNOWN.	363	48	312	294	4	14	*	3	*	*	*	*	*	*
NO REPORT..............	1,369	214	1,106	1,045	39	22	*	13	*	3	7	*	*	26
STATISTICIANS														
TOTAL EMPLOYED..........	2,790	515	1,879	1,879	*	*	*	105	291	*	*	*	*	*
TOTAL SUPPORTED........	1,164	176	663	663	*	*	*	42	283	*	*	*	*	*
NASA..................	61	33	17	17	*	*	*	*	11	*	*	*	*	*
NSF...................	208	*	208	208	*	*	*	*	*	*	*	*	*	*
EPA...................	15	*	*	*	*	*	*	15	*	*	*	*	*	*
DOE...................	179	101	60	60	*	*	*	16	2	*	*	*	*	*
NRC...................	1	*	*	*	*	*	*	1	*	*	*	*	*	*
AID...................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DHHS, TOTAL...........	115	4	59	59	*	*	*	26	26	*	*	*	*	*
NIH..................	42	2	35	35	*	*	*	5	*	*	*	*	*	*
ADAMHA...............	26	*	24	24	*	*	*	2	*	*	*	*	*	*
OTHER DHHS...........	49	2	*	*	*	*	*	21	26	*	*	*	*	*
ED....................	44	*	16	16	*	*	*	*	28	*	*	*	*	*
DOD...................	387	71	219	219	*	*	*	3	94	*	*	*	*	*
COMMERCE..............	49	*	7	7	*	*	*	*	42	*	*	*	*	*
USDA..................	75	*	52	52	*	*	*	6	17	*	*	*	*	*
DOT...................	31	2	15	15	*	*	*	*	14	*	*	*	*	*
JUSTICE...............	41	*	38	38	*	*	*	*	3	*	*	*	*	*
HUD...................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
INTERIOR..............	50	*	48	48	*	*	*	*	2	*	*	*	*	*
OTHER.................	46	*	12	12	*	*	*	*	34	*	*	*	*	*
SOURCE UNKNOWN........	73	*	11	11	*	*	*	*	62	*	*	*	*	*
SOURCE NOT REPORTED...	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NOT SUPPORTED..........	1,346	271	1,042	1,042	*	*	*	27	*	*	*	*	*	*
SUPPORT STATUS UNKNOWN.	70	*	70	70	*	*	*	*	*	*	*	*	*	*
NO REPORT..............	216	68	104	104	*	*	*	36	8	*	*	*	*	*
COMPUTER/INFORMATION SPECIALISTS														
TOTAL EMPLOYED..........	12,164	6,819	4,031	3,905	96	30	70	345	490	27	229	107	*	46
TOTAL SUPPORTED........	3,719	1,369	1,492	1,480	6	6	*	169	490	27	117	45	*	10
NASA..................	248	107	67	67	*	*	*	17	47	*	*	*	*	10
NSF...................	763	43	627	627	*	*	*	29	64	*	*	*	*	*
EPA...................	151	88	23	23	*	*	*	40	*	*	*	*	*	*
DOE...................	344	147	166	166	*	*	*	24	7	*	*	*	*	*
NRC...................	37	37	*	*	*	*	*	*	*	*	*	*	*	*
AID...................	1	*	1	1	*	*	*	*	*	*	*	*	*	*
DHHS, TOTAL...........	435	62	210	210	*	*	*	35	26	15	65	22	*	*
NIH..................	289	32	181	181	*	*	*	35	26	15	*	*	*	*
ADAMHA...............	71	30	29	29	*	*	*	*	*	*	12	*	*	*
OTHER DHHS...........	75	*	*	*	*	*	*	*	*	*	53	22	*	*
ED....................	90	7	57	57	*	*	*	*	*	*	26	*	*	*
DOD...................	1,864	943	632	620	6	6	*	101	176	12	*	*	*	*
COMMERCE..............	45	19	2	2	*	*	*	*	24	*	*	*	*	*
USDA..................	18	7	9	9	*	*	*	*	2	*	*	*	*	*
DOT...................	78	54	24	24	*	*	*	*	*	*	*	*	*	*
JUSTICE...............	38	37	1	1	*	*	*	*	*	*	*	*	*	*
HUD...................	23	*	*	*	*	*	*	*	*	*	23	*	*	*
INTERIOR..............	21	18	*	*	*	*	*	*	*	*	3	*	*	*
OTHER.................	330	117	55	55	*	*	*	11	119	*	5	23	*	*
SOURCE UNKNOWN........	69	35	5	5	*	*	*	*	29	*	*	*	*	*
SOURCE NOT REPORTED...	29	20	9	9	*	*	*	*	*	*	*	*	*	*
NOT SUPPORTED..........	7,335	4,915	2,086	1,999	85	2	53	113	*	*	70	62	*	36
SUPPORT STATUS UNKNOWN.	370	113	179	152	5	22	17	55	*	*	6	*	*	*
NO REPORT..............	740	422	274	274	*	*	*	8	*	*	36	*	*	*

* NO CASES REPORTED

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TABLE B-29. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, SUPPORTING AGENCY, AND TYPE OF EMPLOYER: 1983
CONTINUED

FIELD AND SUPPORTING AGENCY	TOTAL EMPL	BUSINESS/ INDUSTRY	EDUCATIONAL INSTITUTIONS TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL	HOSPITAL/ CLINIC	NON-PROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NO REPORT
ENVIRONMENTAL SCIENTISTS														
TOTAL EMPLOYED..........	16,467	5,154	6,682	6,519	144	19	*	555	3,102	108	633	186	*	47
TOTAL SUPPORTED........	8,842	1,251	3,677	3,676	1	*	*	412	3,102	108	250	35	*	7
NASA..................	1,112	120	492	492	*	*	*	101	399	*	*	*	*	*
NSF...................	2,494	92	2,015	2,015	*	*	*	242	109	*	31	5	*	*
EPA...................	1,365	466	382	382	*	*	*	67	304	7	110	29	*	*
DOE...................	1,229	282	647	647	*	*	*	119	145	*	36	*	*	*
NRC...................	160	13	72	72	*	*	*	8	67	*	*	*	*	*
AID...................	99	45	18	18	*	*	*	14	12	*	*	*	*	*
DHHS, TOTAL...........	94	22	47	47	*	*	*	7	18	*	*	*	*	*
NIH..................	62	22	33	33	*	*	*	7	*	*	*	*	*	*
ADAMHA...............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER DHHS...........	32	*	14	14	*	*	*	*	18	*	*	*	*	*
ED....................	2	*	2	1	1	*	*	*	*	*	*	*	*	*
DOD...................	1,875	390	755	755	*	*	*	108	531	82	9	*	*	*
COMMERCE..............	1,259	54	597	597	*	*	*	56	512	19	21	*	*	*
USDA..................	411	41	202	202	*	*	*	*	126	*	42	*	*	*
DOT...................	77	13	31	31	*	*	*	*	31	*	2	*	*	*
JUSTICE...............	36	16	13	13	*	*	*	*	*	*	*	*	*	7
HUD...................	4	2	*	*	*	*	*	*	2	*	*	*	*	*
INTERIOR..............	2,041	217	577	577	*	*	*	30	1,135	*	82	*	*	*
OTHER.................	322	76	109	109	*	*	*	13	122	*	1	1	*	*
SOURCE UNKNOWN........	128	5	18	18	*	*	*	*	105	*	*	*	*	*
SOURCE NOT REPORTED...	32	*	23	23	*	*	*	9	*	*	*	*	*	*
NOT SUPPORTED..........	6,538	3,499	2,552	2,423	110	19	*	110	*	*	263	114	*	*
SUPPORT STATUS UNKNOWN.	154	1	74	66	8	*	*	21	*	*	55	3	*	*
NO REPORT.............	933	403	379	354	25	*	*	12	*	*	65	34	*	40
EARTH SCIENTISTS														
TOTAL EMPLOYED..........	12,523	4,596	4,658	4,497	142	19	*	271	2,176	46	552	185	*	39
TOTAL SUPPORTED........	5,600	944	2,034	2,033	1	*	*	146	2,176	46	213	34	*	7
NASA..................	533	37	189	189	*	*	*	58	249	*	*	*	*	*
NSF...................	1,282	82	1,018	1,018	*	*	*	81	73	*	23	5	*	*
EPA...................	868	366	170	170	*	*	*	13	185	7	98	29	*	*
DOE...................	928	250	491	491	*	*	*	38	119	*	30	*	*	*
NRC...................	138	11	72	72	*	*	*	*	55	*	*	*	*	*
AID...................	64	32	18	18	*	*	*	14	*	*	*	*	*	*
DHHS, TOTAL...........	57	22	10	10	*	*	*	7	18	*	*	*	*	*
NIH..................	39	22	10	10	*	*	*	7	*	*	*	*	*	*
ADAMHA...............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER DHHS...........	18	*	*	*	*	*	*	*	18	*	*	*	*	*
ED....................	2	*	2	1	1	*	*	*	*	*	*	*	*	*
DOD...................	987	290	287	287	*	*	*	67	309	34	*	*	*	*
COMMERCE..............	275	30	97	97	*	*	*	13	123	5	7	*	*	*
USDA..................	283	41	79	79	*	*	*	*	121	*	42	*	*	*
DOT...................	24	5	9	9	*	*	*	*	8	*	2	*	*	*
JUSTICE...............	28	8	13	13	*	*	*	*	*	*	*	*	*	7
HUD...................	4	2	*	*	*	*	*	*	2	*	*	*	*	*
INTERIOR..............	1,715	176	397	397	*	*	*	10	1,065	*	67	*	*	*
OTHER.................	215	48	43	43	*	*	*	13	111	*	*	*	*	*
SOURCE UNKNOWN........	99	5	12	12	*	*	*	*	82	*	*	*	*	*
SOURCE NOT REPORTED...	22	*	15	15	*	*	*	7	*	*	*	*	*	*
NOT SUPPORTED..........	5,973	3,268	2,248	2,121	108	19	*	97	*	*	246	114	*	*
SUPPORT STATUS UNKNOWN.	153	1	73	65	8	*	*	21	*	*	55	3	*	*
NO REPORT.............	797	383	303	278	25	*	*	7	*	*	38	34	*	32
OCEANOGRAPHERS														
TOTAL EMPLOYED..........	1,742	217	1,082	1,080	2	*	*	95	274	8	57	1	*	8
TOTAL SUPPORTED........	1,399	129	881	881	*	*	*	83	274	8	23	1	*	*
NASA..................	70	15	42	42	*	*	*	8	5	*	*	*	*	*
NSF...................	634	5	549	549	*	*	*	47	27	*	6	*	*	*
EPA...................	194	61	69	69	*	*	*	38	26	*	*	*	*	*
DOE...................	107	5	58	58	*	*	*	30	8	*	6	*	*	*
NRC...................	8	*	*	*	*	*	*	8	*	*	*	*	*	*
AID...................	25	13	*	*	*	*	*	*	12	*	*	*	*	*
DHHS, TOTAL...........	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NIH..................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ADAMHA...............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER DHHS...........	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ED....................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DOD...................	407	27	275	275	*	*	*	19	71	8	7	*	*	*
COMMERCE..............	550	22	377	377	*	*	*	37	100	*	14	*	*	*
USDA..................	28	*	28	28	*	*	*	*	*	*	*	*	*	*
DOT...................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
JUSTICE...............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HUD...................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
INTERIOR..............	259	41	130	130	*	*	*	12	61	*	15	*	*	*
OTHER.................	75	*	62	62	*	*	*	*	11	*	1	1	*	*
SOURCE UNKNOWN........	11	*	1	1	*	*	*	*	10	*	*	*	*	*
SOURCE NOT REPORTED...	8	*	8	8	*	*	*	*	*	*	*	*	*	*
NOT SUPPORTED..........	233	81	138	136	2	*	*	7	*	*	7	*	*	*
SUPPORT STATUS UNKNOWN.	1	*	1	1	*	*	*	*	*	*	*	*	*	*
NO REPORT.............	109	7	62	62	*	*	*	5	*	*	27	*	*	8

* NO CASES REPORTED

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TABLE B-29. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, SUPPORTING AGENCY, AND TYPE OF EMPLOYER: 1983
CONTINUED

FIELD AND SUPPORTING AGENCY	TOTAL EMPL	BUSINESS/ INDUSTRY	EDUCATIONAL INSTITUTIONS				HOSPITAL/ CLINIC	NON-PROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NO REPORT
			TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL								
ATMOSPHERIC SCIENTISTS														
TOTAL EMPLOYED..........	2,202	341	942	942	*	*	*	189	652	54	24	*	*	*
TOTAL SUPPORTED........	1,843	178	762	762	*	*	*	183	652	54	14	*	*	*
NASA..................	509	68	261	261	*	*	*	35	145	*	*	*	*	*
NSF...................	578	5	448	448	*	*	*	114	9	*	2	*	*	*
EPA...................	303	39	143	143	*	*	*	16	93	*	12	*	*	*
DOE...................	194	27	98	98	*	*	*	51	18	*	*	*	*	*
NRC...................	14	2	*	*	*	*	*	*	12	*	*	*	*	*
AID...................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DHHS, TOTAL...........	37	*	37	37	*	*	*	*	*	*	*	*	*	*
NIH..................	23	*	23	23	*	*	*	*	*	*	*	*	*	*
ADAMHA...............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER DHHS...........	14	*	14	14	*	*	*	*	*	*	*	*	*	*
ED....................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DOD...................	481	73	193	193	*	*	*	22	151	40	2	*	*	*
COMMERCE..............	434	2	123	123	*	*	*	6	289	14	*	*	*	*
USDA..................	100	*	95	95	*	*	*	*	5	*	*	*	*	*
DOT...................	53	8	22	22	*	*	*	*	23	*	*	*	*	*
JUSTICE...............	8	8	*	*	*	*	*	*	*	*	*	*	*	*
HUD...................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
INTERIOR..............	67	*	50	50	*	*	*	8	9	*	*	*	*	*
OTHER.................	32	28	4	4	*	*	*	*	*	*	*	*	*	*
SOURCE UNKNOWN........	18	*	5	5	*	*	*	*	13	*	*	*	*	*
SOURCE NOT REPORTED...	2	*	*	*	*	*	*	2	*	*	*	*	*	*
NOT SUPPORTED..........	332	150	166	166	*	*	*	6	*	*	10	*	*	*
SUPPORT STATUS UNKNOWN.	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT..............	27	13	14	14	*	*	*	*	*	*	*	*	*	*
LIFE SCIENTISTS														
TOTAL EMPLOYED..........	92,802	16,444	58,906	57,315	1,287	304	3,606	3,258	7,771	728	1,304	406	158	221
TOTAL SUPPORTED........	46,947	1,804	32,235	32,046	154	35	1,613	2,036	7,688	719	636	148	51	17
NASA..................	403	13	299	289	10	*	*	11	72	8	*	*	*	*
NSF...................	5,543	51	5,111	5,029	82	*	14	285	69	*	13	*	*	*
EPA...................	1,591	189	952	952	*	*	7	89	299	6	8	41	*	*
DOE...................	1,568	202	988	981	7	*	13	225	140	*	*	*	*	*
NRC...................	80	22	51	51	*	*	*	*	7	*	*	*	*	*
AID...................	967	67	609	609	*	*	*	121	170	*	*	*	*	*
DHHS, TOTAL...........	25,082	1,046	18,786	18,756	23	7	858	1,566	2,330	210	231	55	*	*
NIH..................	22,225	809	17,299	17,269	23	7	749	1,421	1,683	108	137	19	*	*
ADAMHA...............	1,509	57	1,134	1,134	*	*	29	53	204	*	24	8	*	*
OTHER DHHS...........	2,211	234	1,037	1,037	*	*	80	157	485	102	78	38	*	*
ED....................	437	*	360	317	15	28	*	33	15	*	9	20	*	*
DOD...................	2,109	86	633	631	2	*	117	69	684	502	11	*	*	7
COMMERCE..............	601	42	350	350	*	*	*	3	148	*	*	44	12	*
USDA..................	11,387	137	8,102	8,102	*	*	*	119	2,875	*	131	13	*	10
DOT...................	66	*	42	42	*	*	*	*	24	*	*	*	*	*
JUSTICE...............	16	7	*	*	*	*	*	*	8	1	*	*	*	*
HUD...................	6	*	*	*	*	*	*	6	*	*	*	*	*	*
INTERIOR..............	1,545	78	637	637	*	*	*	2	647	*	145	36	*	*
OTHER.................	2,321	77	762	729	33	*	653	17	663	7	86	17	39	*
SOURCE UNKNOWN........	712	60	327	307	20	*	28	7	269	*	12	9	*	*
SOURCE NOT REPORTED...	404	20	339	339	*	*	37	*	*	*	8	*	*	*
NOT SUPPORTED..........	37,055	13,050	20,774	19,705	851	218	1,533	933	*	*	506	149	92	18
SUPPORT STATUS UNKNOWN.	2,142	214	1,646	1,502	118	26	112	29	*	*	74	67	*	*
NO REPORT..............	6,658	1,376	4,251	4,062	164	25	348	260	83	9	88	42	15	186
BIOLOGICAL SCIENTISTS														
TOTAL EMPLOYED..........	55,205	7,730	38,046	36,780	1,025	241	1,296	2,344	4,622	214	591	170	91	101
TOTAL SUPPORTED........	29,940	1,167	21,325	21,166	152	7	813	1,545	4,574	212	266	21	*	17
NASA..................	263	*	231	221	10	*	*	11	21	*	*	*	*	*
NSF...................	5,191	44	4,770	4,688	82	*	14	285	65	*	13	*	*	*
EPA...................	1,014	169	529	529	*	*	7	62	245	*	2	*	*	*
DOE...................	1,114	158	745	738	7	*	7	187	17	*	*	*	*	*
NRC...................	60	9	51	51	*	*	*	*	*	*	*	*	*	*
AID...................	194	6	146	146	*	*	*	5	37	*	*	*	*	*
DHHS, TOTAL...........	18,658	679	14,227	14,197	23	7	571	1,267	1,739	65	110	*	*	*
NIH..................	17,286	625	13,523	13,493	23	7	549	1,212	1,265	40	72	*	*	*
ADAMHA...............	822	2	622	622	*	*	8	37	140	*	13	*	*	*
OTHER DHHS...........	1,053	64	472	472	*	*	14	83	370	25	25	*	*	*
ED....................	187	*	175	160	15	*	*	12	*	*	*	*	*	*
DOD...................	1,286	79	464	462	2	*	28	69	481	147	11	*	*	7
COMMERCE..............	389	37	246	246	*	*	*	5	93	*	*	8	*	*
USDA..................	4,604	64	3,024	3,024	*	*	*	64	1,376	*	58	8	*	10
DOT...................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
JUSTICE...............	6	*	*	*	*	*	*	*	6	*	*	*	*	*
HUD...................	6	*	*	*	*	*	*	6	*	*	*	*	*	*
INTERIOR..............	810	56	329	329	*	*	*	2	380	*	43	*	*	*
OTHER.................	1,122	64	454	421	33	*	211	12	343	*	38	*	*	*
SOURCE UNKNOWN........	384	33	180	162	18	*	15	7	141	*	3	5	*	*
SOURCE NOT REPORTED...	255	2	216	216	*	*	37	*	*	*	*	*	*	*
NOT SUPPORTED..........	20,228	5,831	13,013	12,141	674	198	366	563	*	*	252	99	91	13
SUPPORT STATUS UNKNOWN.	1,046	98	897	765	117	15	*	20	*	*	17	14	*	*
NO REPORT..............	3,991	634	2,811	2,708	82	21	117	216	48	2	56	36	*	71

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TABLE B-29. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, SUPPORTING AGENCY, AND TYPE OF EMPLOYER: 1983
CONTINUED

			EDUCATIONAL INSTITUTIONS											
FIELD AND SUPPORTING AGENCY	TOTAL EMPL	BUSINESS/ INDUSTRY	TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL	HOSPITAL/ CLINIC	NON-PROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NO REPORT
AGRICULTURAL SCIENTISTS														
TOTAL EMPLOYED..........	14,536	3,583	8,189	8,036	132	21	5	305	2,036	*	259	36	58	65
TOTAL SUPPORTED........	8,111	164	5,517	5,496	*	21	*	141	2,027	*	175	36	51	*
NASA..................	57	7	24	24	*	*	*	*	26	*	*	*	*	*
NSF...................	220	7	213	213	*	*	*	*	*	*	*	*	*	*
EPA...................	375	*	300	300	*	*	*	9	30	*	*	36	*	*
DOE...................	166	7	95	95	*	*	*	*	64	*	*	*	*	*
NRC...................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
AID...................	715	59	430	430	*	*	*	113	113	*	*	*	*	*
DHHS, TOTAL...........	172	7	135	135	*	*	*	*	30	*	*	*	*	*
NIH..................	144	7	135	135	*	*	*	*	2	*	*	*	*	*
ADAMHA...............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER DHHS...........	37	*	9	9	*	*	*	*	28	*	*	*	*	*
ED....................	58	*	48	27	*	21	*	*	10	*	*	*	*	*
DOD...................	164	*	28	28	*	*	*	*	136	*	*	*	*	*
COMMERCE..............	199	5	91	91	*	*	*	*	55	*	*	36	12	*
USDA..................	6,358	67	4,717	4,717	*	*	*	49	1,452	*	73	*	*	*
DOT...................	16	*	16	16	*	*	*	*	*	*	*	*	*	*
JUSTICE...............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HUD...................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
INTERIOR..............	723	22	296	296	*	*	*	*	267	*	102	36	*	*
OTHER.................	162	1	61	61	*	*	*	3	58	*	*	*	39	*
SOURCE UNKNOWN........	132	*	63	63	*	*	*	*	69	*	*	*	*	*
SOURCE NOT REPORTED...	74	11	63	63	*	*	*	*	*	*	*	*	*	*
NOT SUPPORTED..........	5,188	3,152	1,817	1,711	106	*	5	155	*	*	59	*	*	*
SUPPORT STATUS UNKNOWN.	325	47	262	262	*	*	*	9	*	*	7	*	*	*
NO REPORT..............	912	220	593	567	26	*	*	*	9	*	18	*	7	65
MEDICAL SCIENTISTS														
TOTAL EMPLOYED..........	23,061	5,131	12,671	12,499	130	42	2,305	609	1,113	514	454	200	9	55
TOTAL SUPPORTED........	8,896	473	5,393	5,384	2	7	800	350	1,087	507	195	91	*	*
NASA..................	83	6	44	44	*	*	*	*	25	8	*	*	*	*
NSF...................	132	*	128	128	*	*	*	*	4	*	*	*	*	*
EPA...................	202	20	123	123	*	*	*	18	24	6	6	5	*	*
DOE...................	288	37	148	148	*	*	6	38	59	*	*	*	*	*
NRC...................	20	13	*	*	*	*	*	*	7	*	*	*	*	*
AID...................	58	2	3[illegible]	33	*	*	*	3	20	*	*	*	*	*
DHHS, TOTAL...........	6,252	360	4,4[illegible]	4,424	*	*	287	299	561	145	121	55	*	*
NIH..................	4,795	177	3,641	3,641	*	*	200	209	416	68	65	19	*	*
ADAMHA...............	687	55	512	512	*	*	21	16	64	*	11	8	*	*
OTHER DHHS...........	1,121	170	556	556	*	*	66	74	87	77	53	38	*	*
ED....................	192	*	137	130	*	7	*	21	5	*	9	20	*	*
DOD...................	659	7	141	141	*	*	89	*	67	355	*	*	*	*
COMMERCE..............	13	*	13	13	*	*	*	*	*	*	*	*	*	*
USDA..................	425	6	361	361	*	*	*	6	47	*	*	5	*	*
DOT...................	50	*	26	26	*	*	*	*	24	*	*	*	*	*
JUSTICE...............	10	7	*	*	*	*	*	*	2	1	*	*	*	*
HUD...................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
INTERIOR..............	12	*	12	12	*	*	*	*	*	*	*	*	*	*
OTHER.................	1,037	12	247	247	*	*	442	2	262	7	48	17	*	*
SOURCE UNKNOWN........	196	27	84	82	2	*	13	*	59	*	9	4	*	*
SOURCE NOT REPORTED...	75	7	60	60	*	*	*	*	*	*	8	*	*	*
NOT SUPPORTED..........	11,639	4,067	5,944	5,853	71	20	1,162	215	*	*	195	50	1	5
SUPPORT STATUS UNKNOWN.	771	69	487	475	1	11	112	*	*	*	50	53	*	*
NO REPORT..............	1,755	522	847	787	56	4	231	44	26	7	14	6	8	50
PSYCHOLOGISTS														
TOTAL EMPLOYED..........	46,645	13,020	22,182	19,377	951	1,854	6,042	1,773	1,191	188	1,250	89[illegible]	*	101
TOTAL SUPPORTED........	11,302	1,995	5,063	4,471	78	514	1,805	558	1,191	188	251	251	*	*
NASA..................	101	23	66	66	*	*	*	12	*	*	*	*	*	*
NSF...................	803	32	694	694	*	*	*	77	*	*	*	*	*	*
EPA...................	73	3	46	46	*	*	24	*	*	*	*	*	*	*
DOE...................	97	44	3	3	*	*	24	*	26	*	*	*	*	*
NRC...................	21	*	21	21	*	*	*	*	*	*	*	*	*	*
AID...................	17	2	8	8	*	*	*	[illegible]	*	*	*	*	*	*
DHHS, TOTAL...........	5,089	814	2,703	2,663	16	24	723	[illegible]73	213	28	163	172	*	*
NIH..................	1,998	252	1,385	1,369	16	*	190	72	90	4	1	4	*	*
ADAMHA...............	2,606	355	1,217	1,217	*	*	523	195	80	*	82	154	*	*
OTHER DHHS...........	738	273	229	205	*	24	48	22	43	24	81	18	*	*
ED....................	1,228	137	999	578	27	394	11	63	10	*	8	*	*	*
DOD...................	1,516	419	347	343	*	4	30	35	525	160	*	*	*	*
COMMERCE..............	29	*	*	*	*	*	*	*	29	*	*	*	*	*
USDA..................	79	47	12	12	*	*	*	20	*	*	*	*	*	*
DOT...................	107	23	12	12	*	*	*	2[illegible]	23	*	*	21	*	*
JUSTICE...............	266	12	121	121	*	*	*	[illegible]	42	*	64	4	*	*
HUD...................	80	54	*	*	*	*	*	26	*	*	*	*	*	*
INTERIOR..............	73	23	41	41	*	*	*	1	8	*	*	*	*	*
OTHER.................	1,870	380	348	321	27	*	[illegible]02	2	336	*	2	*	*	*
SOURCE UNKNOWN........	624	106	232	139	*	93	[illegible]76	14	59	*	9	28	*	*
SOURCE NOT REPORTED...	232	57	60	45	8	7	46	38	*	*	5	26	*	*
NOT SUPPORTED..........	29,454	9,550	14,645	12,998	767	880	3,075	985	*	*	748	434	*	17
SUPPORT STATUS UNKNOWN.	2,200	219	970	655	88	227	670	98	*	*	116	127	*	*
NO REPORT..............	3,689	1,256	1,504	1,253	18	233	492	132	*	*	135	86	*	84

* NO CASES REPORTED

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TABLE B-29. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, SUPPORTING AGENCY, AND TYPE OF EMPLOYER: 1983
CONTINUED

FIELD AND SUPPORTING AGENCY	TOTAL EMPL	BUSINESS/ INDUSTRY	EDUCATIONAL INSTITUTIONS				HOSPITAL/ CLINIC	NONPROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NO REPORT
			TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL								
SOCIAL SCIENTISTS														
TOTAL EMPLOYED..........	59,332	6,751	42,754	40,966	1,420	368	151	2,080	4,299	377	1,453	601	778	88
TOTAL SUPPORTED........	16,487	[illegible]	8,490	8,260	201	29	91	771	4,299	377	529	198	231	*
NASA..................	[illegible]	25	28	28	*	*	*	*	61	*	*	*	*	*
NSF...................	1,513	59	1,250	1,227	31	*	*	91	105	*	*	*	*	*
EPA...................	499	139	203	203	*	*	*	69	27	*	54	7	*	*
DOE...................	431	177	164	164	*	*	*	59	31	*	*	*	*	*
NRC...................	83	24	*	*	*	*	*	59	*	*	*	*	*	*
AID...................	901	176	515	515	*	*	*	116	94	*	*	*	*	*
DHHS, TOTAL...........	2,304	330	1,281	1,250	31	*	[illegible]	184	234	*	192	16	1	*
NIH..................	846	80	506	475	31	*	[illegible]	80	75	*	39	2	*	*
ADAMHA...............	425	42	242	242	*	*	2	30	16	*	89	4	*	*
OTHER DHHS...........	1,260	225	614	614	*	*	61	74	159	*	116	10	1	*
ED....................	1,141	78	882	782	71	29	25	74	51	*	31	*	*	*
DOD...................	1,449	330	269	269	*	*	*	18	436	336	26	34	*	*
COMMERCE..............	979	74	371	371	*	*	*	41	392	*	78	*	23	*
USDA..................	2,389	131	1,549	1,549	*	*	*	4	705	*	*	*	*	*
DOT...................	283	75	188	188	*	*	*	*	*	*	5	15	*	*
JUSTICE...............	391	105	165	165	*	*	*	34	87	*	*	*	*	*
HUD...................	382	73	131	101	36	*	61	23	51	*	*	43	*	*
INTERIOR..............	763	70	396	396	*	*	*	*	177	*	89	31	*	*
OTHER.................	4,357	441	1,840	1,806	34	*	*	227	1,472	36	140	52	149	*
SOURCE UNKNOWN........	962	43	429	390	39	*	*	4	468	5	7	*	6	*
SOURCE NOT REPORTED...	93	20	26	26	*	*	*	5	*	*	*	*	42	*
NOT SUPPORTED..........	36,679	4,469	29,512	28,166	1,067	279	60	[illegible]	*	*	668	310	480	38
SUPPORT STATUS UNKNOWN.	1,266	97	1,079	958	84	37	*	3	*	*	27	33	27	*
NO REPORT..............	4,900	674	3,673	3,582	68	23	*	164	*	*	229	60	50	50
ECONOMISTS														
TOTAL EMPLOYED..........	16,958	2,779	11,362	11,264	98	*	15	219	1,692	5	141	92	617	36
TOTAL SUPPORTED........	5,231	640	2,647	2,645	2	*	*	48	1,692	5	2	42	155	*
NASA..................	28	28	*	*	*	*	*	*	*	*	*	*	*	*
NSF...................	239	31	208	208	*	*	*	*	*	*	*	*	*	*
EPA...................	209	90	70	70	*	*	*	32	17	*	*	*	*	*
DOE...................	160	62	59	59	*	*	*	22	17	*	*	*	*	*
NRC...................	22	*	*	*	*	*	*	22	*	*	*	*	*	*
AID...................	417	138	235	235	*	*	*	7	37	*	*	*	*	*
DHHS, TOTAL...........	204	34	157	157	*	*	*	4	4	*	*	5	*	*
NIH..................	29	*	25	25	*	*	*	*	4	*	*	*	*	*
ADAMHA...............	45	*	45	45	*	*	*	*	*	*	*	*	*	*
OTHER DHHS...........	151	34	108	108	*	*	*	4	*	*	*	5	*	*
ED....................	159	34	125	125	*	*	*	*	*	*	*	*	*	*
DOD...................	256	109	73	73	*	*	*	*	74	*	*	*	*	*
COMMERCE..............	448	40	256	256	*	*	*	*	152	*	*	*	*	*
USDA..................	1,644	56	1,121	1,121	*	*	*	*	467	*	*	*	*	*
DOT...................	3	*	3	3	*	*	*	*	*	*	*	*	*	*
JUSTICE...............	84	40	*	*	*	*	*	*	44	*	*	*	*	*
HUD...................	150	59	89	89	*	*	*	*	2	*	*	*	*	*
INTERIOR..............	163	38	105	105	*	*	*	*	18	*	2	*	*	*
OTHER.................	1,328	80	482	482	*	*	*	5	611	*	*	37	113	*
SOURCE UNKNOWN........	431	43	96	96	2	*	*	*	285	5	*	*	*	*
SOURCE NOT REPORTED...	48	6	*	*	*	*	*	*	*	*	*	*	42	*
NOT SUPPORTED..........	9,827	1,926	7,161	7,102	59	*	15	154	*	*	92	50	412	17
SUPPORT STATUS UNKNOWN.	337	*	337	317	20	*	*	*	*	*	*	*	*	*
NO REPORT..............	1,563	213	1,217	1,200	17	*	*	17	*	*	47	*	50	19
SOCIOLOGISTS/ANTHRO.														
TOTAL EMPLOYED..........	12,056	801	10,369	9,841	443	85	37	431	121	27	163	46	53	8
TOTAL SUPPORTED........	2,927	92	2,358	2,193	136	29	25	184	121	27	56	31	33	*
NASA..................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NSF...................	514	*	511	480	31	*	*	3	*	*	*	*	*	*
EPA...................	79	23	56	56	*	*	*	*	*	*	*	*	*	*
DOE...................	1	*	1	1	*	*	*	*	*	*	*	*	*	*
NRC...................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
AID...................	82	*	82	82	*	*	*	*	*	*	*	*	*	*
DHHS, TOTAL...........	944	65	730	699	31	*	*	92	31	*	26	*	*	*
NIH..................	495	65	349	318	31	*	*	29	26	*	26	*	*	*
ADAMHA...............	224	*	154	154	*	*	*	28	16	*	26	*	*	*
OTHER DHHS...........	334	*	268	268	*	*	*	35	5	*	26	*	*	*
ED....................	452	*	413	313	71	29	25	10	*	*	4	*	*	*
DOD...................	90	*	37	37	*	*	*	*	*	27	26	*	*	*
COMMERCE..............	23	*	*	*	*	*	*	*	*	*	*	*	23	*
USDA..................	275	*	245	245	*	*	*	*	30	*	*	*	*	*
DOT...................	31	*	31	31	*	*	*	*	*	*	*	*	*	*
JUSTICE...............	32	*	32	32	*	*	*	*	*	*	*	*	*	*
HUD...................	30	*	30	*	30	*	*	*	*	*	*	*	*	*
INTERIOR..............	146	4	111	111	*	*	*	*	*	*	*	31	*	*
OTHER.................	550	23	378	370	8	*	*	79	60	*	*	*	10	*
SOURCE UNKNOWN........	102	*	102	102	*	*	*	*	*	*	*	*	*	*
SOURCE NOT REPORTED...	26	*	26	26	*	*	*	*	*	*	*	*	*	*
NOT SUPPORTED..........	7,932	567	7,059	[illegible]	303	33	12	221	*	*	38	15	[illegible]	*
SUPPORT STATUS UNKNOWN.	312	52	260	260	*	*	*	*	*	*	*	*	*	*
NO REPORT..............	885	90	692	665	4	23	*	26	*	*	69	*	*	8

* NO CASES REPORTED

TABLE B-29. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, SUPPORTING AGENCY, AND TYPE OF EMPLOYER: 1983
CONTINUED

FIELD AND SUPPORTING AGENCY	TOTAL EMPL	BUS-INESS/ INDUS-TRY	EDUCATIONAL INSTITUTIONS				HOS-PITAL/ CLINIC	NON-PROFIT ORGS	FED-ERAL GOV'T	MILI-TARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NO REPORT
			TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOLS								
OTHER SOCIAL SCIENTISTS														
TOTAL EMPLOYED..........	30,318	3,171	21,023	19,861	879	283	99	1,430	2,486	345	1,149	463	108	44
TOTAL SUPPORTED........	8,329	779	3,485	3,422	63	*	66	539	2,486	345	471	125	33	*
NASA....................	90	1	28	28	*	*	*	*	61	*	*	*	*	*
NSF.....................	760	28	539	539	*	*	*	88	105	*	*	*	*	*
EPA.....................	211	26	77	77	*	*	*	37	10	*	54	7	*	*
DOE.....................	270	115	104	104	*	*	*	37	14	*	*	*	*	*
NRC.....................	61	24	*	*	*	*	*	37	*	*	*	*	*	*
AID.....................	402	38	198	198	*	*	*	109	57	*	*	*	*	*
DHHS, TOTAL.............	1,156	231	394	394	*	*	66	88	199	*	166	11	1	*
NIH....................	322	15	132	132	*	*	64	51	45	*	13	2	*	*
ADAMHA.................	156	42	43	43	*	*	2	2	*	*	63	4	*	*
OTHER DHHS.............	775	191	238	238	*	*	61	35	154	*	90	5	1	*
ED......................	530	44	344	344	*	*	*	64	51	*	27	*	*	*
DOD.....................	1,103	221	159	159	*	*	*	18	362	309	*	34	*	*
COMMERCE................	508	34	115	115	*	*	*	41	240	*	78	*	*	*
USDA....................	470	75	183	183	*	*	*	4	208	*	*	*	*	*
DOT.....................	249	75	154	154	*	*	*	*	*	*	5	15	*	*
JUSTICE.................	275	65	133	133	*	*	*	34	43	*	*	*	*	*
HUD.....................	202	14	12	12	*	*	61	23	49	*	*	43	*	*
INTERIOR................	454	28	180	180	*	*	*	*	159	*	87	*	*	*
OTHER...................	2,479	338	980	954	26	*	*	143	801	36	140	15	26	*
SOURCE UNKNOWN........	429	*	229	192	37	*	*	4	183	*	7	*	6	*
SOURCE NOT REPORTED...	19	14	*	*	*	*	*	5	*	*	*	*	*	*
NOT SUPPORTED..........	18,920	1,976	15,292	14,341	705	246	33	767	*	*	538	245	48	21
SUPPORT STATUS UNKNOWN.	617	45	482	381	64	37	*	3	*	*	27	33	27	*
NO REPORT..............	2,452	371	1,764	1,717	47	*	*	121	*	*	113	60	*	23
ENGINEERS														
TOTAL EMPLOYED..........	61,545	34,500	20,320	20,249	71	*	7	1,921	3,843	424	94	289	41	106
TOTAL SUPPORTED........	27,128	10,349	10,900	10,883	17	*	7	1,501	3,842	424	48	55	2	*
NASA....................	3,076	1,166	1,167	1,167	*	*	*	102	633	8	*	*	*	*
NSF.....................	3,792	336	3,301	3,299	2	*	*	151	2	2	*	*	*	*
EPA.....................	697	273	319	304	15	*	*	60	21	15	1	8	*	*
DOE.....................	6,921	3,460	2,572	2,572	*	*	*	521	314	2	44	6	2	*
NRC.....................	1,343	630	344	344	*	*	*	183	184	*	*	*	2	*
AID.....................	444	137	268	268	*	*	*	39	*	*	*	*	*	*
DHHS, TOTAL.............	1,350	115	1,016	1,016	*	*	7	73	125	14	*	*	*	*
NIH....................	1,110	65	906	906	*	*	7	63	55	14	*	*	*	*
ADAMHA.................	39	*	22	22	*	*	7	10	*	*	*	*	*	*
OTHER DHHS.............	241	50	121	121	*	*	*	*	70	*	*	*	*	*
ED......................	166	*	166	166	*	*	*	*	*	*	*	*	*	*
DOD.....................	11,921	6,020	2,951	2,951	*	*	*	819	1,743	385	3	*	*	*
COMMERCE................	886	197	380	380	*	*	*	22	280	*	*	7	*	*
USDA....................	1,157	81	838	838	*	*	*	*	238	*	*	*	*	*
DOT.....................	1,125	376	546	546	*	*	*	83	114	*	*	6	*	*
JUSTICE.................	1	*	1	1	*	*	*	*	*	*	*	*	*	*
HUD.....................	43	22	*	*	*	*	*	6	15	*	*	*	*	*
INTERIOR................	754	75	512	512	*	*	*	8	159	*	*	*	*	*
OTHER...................	542	79	251	251	*	*	*	66	112	*	*	34	*	*
SOURCE UNKNOWN........	807	295	152	152	*	*	*	56	304	*	*	*	*	*
SOURCE NOT REPORTED...	122	63	59	59	*	*	*	*	*	*	*	*	*	*
NOT SUPPORTED..........	29,754	21,612	7,533	7,481	52	*	*	326	*	*	38	209	34	2
SUPPORT STATUS UNKNOWN.	612	375	197	195	2	*	*	2	*	*	8	25	5	*
NO REPORT..............	4,051	2,164	1,690	1,690	*	*	*	92	1	*	*	*	*	104
AERO/ASTRO ENGINEERS														
TOTAL EMPLOYED..........	3,684	1,928	865	865	*	*	*	305	511	74	*	1	*	*
TOTAL SUPPORTED........	2,835	1,278	667	667	*	*	*	305	511	74	*	*	*	*
NASA....................	1,085	541	222	222	*	*	*	14	300	8	*	*	*	*
NSF.....................	175	*	175	175	*	*	*	*	*	*	*	*	*	*
EPA.....................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DOE.....................	109	65	30	30	*	*	*	14	*	*	*	*	*	*
NRC.....................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
AID.....................	79	*	79	79	*	*	*	*	*	*	*	*	*	*
DHHS, TOTAL.............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NIH....................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ADAMHA.................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER DHHS.............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ED......................	79	*	79	79	*	*	*	*	*	*	*	*	*	*
DOD.....................	1,680	1,012	251	251	*	*	*	213	138	66	*	*	*	*
COMMERCE................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
USDA....................	79	*	79	79	*	*	*	*	*	*	*	*	*	*
DOT.....................	145	22	*	*	*	*	*	79	44	*	*	*	*	*
JUSTICE.................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HUD.....................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
INTERIOR................	79	*	79	79	*	*	*	*	*	*	*	*	*	*
OTHER...................	81	3	78	78	*	*	*	*	*	*	*	*	*	*
SOURCE UNKNOWN........	79	37	*	*	*	*	*	13	29	*	*	*	*	*
SOURCE NOT REPORTED...	18	4	14	14	*	*	*	*	*	*	*	*	*	*
NOT SUPPORTED..........	736	633	102	102	*	*	*	*	*	*	*	1	*	*
SUPPORT STATUS UNKNOWN.	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT..............	113	17	96	96	*	*	*	*	*	*	*	*	*	*

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TABLE B-29. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, SUPPORTING AGENCY, AND TYPE OF EMPLOYER: 1983
CONTINUED

FIELD AND SUPPORTING AGENCY	TOTAL EMPL	BUSINESS/ INDUSTRY	EDUCATIONAL INSTITUTIONS TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL	HOSPITAL/ CLINIC	NON-PROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NO REPORT
CHEMICAL ENGINEERS														
TOTAL EMPLOYED..........	6,992	4,788	1,722	1,722	*	*	*	202	174	48	*	*	*	58
TOTAL SUPPORTED........	1,792	574	837	837	*	*	*	159	174	48	*	*	*	*
NASA..................	206	22	150	150	*	*	*	*	34	*	*	*	*	*
NSF...................	666	*	586	586	*	*	*	78	*	2	*	*	*	*
EPA...................	141	48	24	24	*	*	*	54	15	*	*	*	*	*
DOE...................	904	548	225	225	*	*	*	78	51	2	*	*	*	*
NRC...................	78	*	*	*	*	*	*	78	*	*	*	*	*	*
AID...................	33	33	*	*	*	*	*	*	*	*	*	*	*	*
DHHS, TOTAL...........	188	33	155	155	*	*	*	*	*	*	*	*	*	*
NIH..................	120	*	120	120	*	*	*	*	*	*	*	*	*	*
ADAMHA...............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER DHHS...........	68	33	35	35	*	*	*	*	*	*	*	*	*	*
ED....................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DOD...................	310	78	124	124	*	*	*	46	16	46	*	*	*	*
COMMERCE..............	145	33	112	112	*	*	*	*	*	*	*	*	*	*
USDA..................	93	*	48	48	*	*	*	*	45	*	*	*	*	*
DOT...................	2	*	2	2	*	*	*	*	*	*	*	*	*	*
JUSTICE...............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HUD...................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
INTERIOR..............	13	*	*	*	*	*	*	*	13	*	*	*	*	*
OTHER.................	3	3	*	*	*	*	*	*	*	*	*	*	*	*
SOURCE UNKNOWN........	55	*	55	55	*	*	*	*	*	*	*	*	*	*
SOURCE NOT REPORTED...	2	2	*	*	*	*	*	*	*	*	*	*	*	*
NOT SUPPORTED..........	4,727	4,000	684	684	*	*	*	43	*	*	*	*	*	*
SUPPORT STATUS UNKNOWN.	81	35	46	46	*	*	*	*	*	*	*	*	*	*
NO REPORT..............	392	179	155	155	*	*	*	*	*	*	*	*	*	58
CIVIL ENGINEERS														
TOTAL EMPLOYED..........	5,317	1,895	3,138	3,121	17	*	*	16	79	42	17	129	1	*
TOTAL SUPPORTED........	2,335	604	1,578	1,563	15	*	*	16	79	42	1	15	*	*
NASA..................	6	*	*	*	*	*	*	*	6	*	*	*	*	*
NSF...................	788	54	732	732	*	*	*	*	2	*	*	*	*	*
EPA...................	254	108	116	101	15	*	*	6	*	15	1	8	*	*
DOE...................	214	142	56	56	*	*	*	16	*	*	*	*	*	*
NRC...................	105	*	71	71	*	*	*	*	34	*	*	*	*	*
AID...................	22	22	*	*	*	*	*	*	*	*	*	*	*	*
DHHS, TOTAL...........	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NIH..................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ADAMHA...............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER DHHS...........	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ED....................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DOD...................	681	232	403	403	*	*	*	*	19	27	*	*	*	*
COMMERCE..............	110	35	66	66	*	*	*	*	2	*	*	7	*	*
USDA..................	27	*	21	21	*	*	*	*	6	*	*	*	*	*
DOT...................	593	174	396	396	*	*	*	*	23	*	*	*	*	*
JUSTICE...............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HUD...................	6	*	*	*	*	*	*	6	*	*	*	*	*	*
INTERIOR..............	174	14	148	148	*	*	*	6	6	*	*	*	*	*
OTHER.................	5	3	*	*	*	*	*	*	2	*	*	*	*	*
SOURCE UNKNOWN........	8	*	1	1	*	*	*	*	7	*	*	*	*	*
SOURCE NOT REPORTED...	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NOT SUPPORTED..........	2,564	1,236	1,207	1,205	2	*	*	*	*	*	16	104	1	*
SUPPORT STATUS UNKNOWN.	104	25	69	69	*	*	*	*	*	*	*	10	*	*
NO REPORT..............	314	30	284	284	*	*	*	*	*	*	*	*	*	*
ELEC./ELECTRON. ENGINEERS														
TOTAL EMPLOYED..........	12,696	7,615	3,960	3,959	1	*	*	218	776	65	47	15	*	*
TOTAL SUPPORTED........	5,290	2,396	1,845	1,845	*	*	*	161	776	65	47	*	*	*
NASA..................	450	203	236	236	*	*	*	3	8	*	*	*	*	*
NSF...................	631	68	520	520	*	*	*	43	*	*	*	*	*	*
EPA...................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DOE...................	744	310	382	382	*	*	*	8	*	*	44	*	*	*
NRC...................	57	57	*	*	*	*	*	*	*	*	*	*	*	*
AID...................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DHHS, TOTAL...........	73	*	73	73	*	*	*	*	*	*	*	*	*	*
NIH..................	73	*	73	73	*	*	*	*	*	*	*	*	*	*
ADAMHA...............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER DHHS...........	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ED....................	34	*	34	34	*	*	*	*	*	*	*	*	*	*
DOD...................	3,486	1,848	859	859	*	*	*	123	588	65	3	*	*	*
COMMERCE..............	125	27	44	44	*	*	*	*	54	*	*	*	*	*
USDA..................	33	19	14	14	*	*	*	*	*	*	*	*	*	*
DOT...................	114	90	22	22	*	*	*	2	*	*	*	*	*	*
JUSTICE...............	1	*	1	1	*	*	*	*	*	*	*	*	*	*
HUD...................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
INTERIOR..............	93	*	90	90	*	*	*	*	3	*	*	*	*	*
OTHER.................	147	11	136	136	*	*	*	*	*	*	*	*	*	*
SOURCE UNKNOWN........	333	174	*	*	*	*	*	*	159	*	*	*	*	*
SOURCE NOT REPORTED...	15	15	*	*	*	*	*	*	*	*	*	*	*	*
NOT SUPPORTED..........	6,159	4,421	1,703	1,702	1	*	*	35	*	*	*	*	*	*
SUPPORT STATUS UNKNOWN.	262	180	67	67	*	*	*	*	*	*	*	15	*	*
NO REPORT..............	985	618	345	345	*	*	*	22	*	*	*	*	*	*

* NO CASES REPORTED

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TABLE B-29. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, SUPPORTING AGENCY, AND TYPE OF EMPLOYER: 1983
CONTINUED

FIELD AND SUPPORTING AGENCY	TOTAL EMPL	BUSINESS/ INDUSTRY	EDUCATIONAL INSTITUTIONS				HOSPITAL/ CLINIC	NON-PROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NO REPORT
			TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL								
MATERIALS SCI. ENGINEERS														
TOTAL EMPLOYED..........	7,422	4,893	1,820	1,820	*	*	*	237	472	*	[illegible]	*	*	*
TOTAL SUPPORTED........	3,098	1,218	1,221	1,221	*	*	*	187	472	*	*	*	*	*
NASA.................	412	132	73	73	*	*	*	30	177	*	*	*	*	*
NSF..................	710	137	543	543	*	*	*	30	*	*	*	*	*	*
EPA..................	102	43	59	59	*	*	*	*	*	*	*	*	*	*
DOE..................	1,135	521	472	472	*	*	*	105	37	*	*	*	*	*
NRC..................	61	32	*	*	*	*	*	29	*	*	*	*	*	*
AID..................	30	*	*	*	*	*	*	30	*	*	*	*	*	*
DHHS, TOTAL..........	186	*	154	154	*	*	*	30	2	*	*	*	*	*
NIH................	184	*	154	154	*	*	*	30	*	*	*	*	*	*
ADAMHA.............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER DHHS.........	2	*	*	*	*	*	*	*	2	*	*	*	*	*
ED...................	14	*	14	14	*	*	*	*	*	*	*	*	*	*
DOD..................	1,160	586	248	248	*	*	*	127	199	*	*	*	*	*
COMMERCE.............	167	21	54	54	*	*	*	*	92	*	*	*	*	*
USDA.................	32	*	32	32	*	*	*	*	*	*	*	*	*	*
DOT..................	26	15	*	*	*	*	*	*	11	*	*	*	*	*
JUSTICE..............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HUD..................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
INTERIOR.............	107	*	72	72	*	*	*	*	35	*	*	*	*	*
OTHER................	60	14	*	*	*	*	*	*	46	*	*	*	*	*
SOURCE UNKNOWN.......	57	46	*	*	*	*	*	*	11	*	*	*	*	*
SOURCE NOT REPORTED...	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NOT SUPPORTED..........	4,152	3,548	554	554	*	*	*	50	*	*	*	*	*	*
SUPPORT STATUS UNKNOWN.	17	17	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT..............	155	110	45	45	*	*	*	*	*	*	*	*	*	*
MECHANICAL ENGINEERS														
TOTAL EMPLOYED..........	5,657	2,596	2,578	2,560	18	*	*	107	353	23	*	*	*	*
TOTAL SUPPORTED........	2,493	917	1,177	1,177	*	*	*	24	352	23	*	*	*	*
NASA.................	448	45	403	403	*	*	*	*	*	*	*	*	*	*
NSF..................	318	3	315	315	*	*	*	*	*	*	*	*	*	*
EPA..................	36	3	33	33	*	*	*	*	*	*	*	*	*	*
DOE..................	849	396	328	328	*	*	*	24	101	*	*	*	*	*
NRC..................	190	143	22	22	*	*	*	22	3	*	*	*	*	*
AID..................	23	23	*	*	*	*	*	*	*	*	*	*	*	*
DHHS, TOTAL..........	55	*	22	22	*	*	*	*	33	*	*	*	*	*
NIH................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ADAMHA.............	22	*	22	22	*	*	*	*	*	*	*	*	*	*
OTHER DHHS.........	33	*	*	*	*	*	*	*	33	*	*	*	*	*
ED...................	1	*	1	1	*	*	*	*	*	*	*	*	*	*
DOD..................	986	453	354	354	*	*	*	*	156	23	*	*	*	*
COMMERCE.............	136	*	44	44	*	*	*	*	92	*	*	*	*	*
USDA.................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DOT..................	59	35	24	24	*	*	*	*	*	*	*	*	*	*
JUSTICE..............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HUD..................	37	22	*	*	*	*	*	*	15	*	*	*	*	*
INTERIOR.............	35	*	*	*	*	*	*	2	33	*	*	*	*	*
OTHER................	35	*	35	35	*	*	*	*	*	*	*	*	*	*
SOURCE UNKNOWN.......	101	22	79	79	*	*	*	*	*	*	*	*	*	*
SOURCE NOT REPORTED...	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NOT SUPPORTED..........	2,875	1,604	1,188	1,170	18	*	*	83	*	*	*	*	*	*
SUPPORT STATUS UNKNOWN.	13	8	5	5	*	*	*	*	*	*	*	*	*	*
NO REPORT..............	276	67	208	208	*	*	*	*	1	*	*	*	*	*
NUCLEAR ENGINEERS														
TOTAL EMPLOYED..........	2,329	1,380	674	674	*	*	*	67	148	*	*	58	2	*
TOTAL SUPPORTED........	1,592	889	486	486	*	*	*	67	148	*	*	*	2	*
NASA.................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NSF..................	13	*	13	13	*	*	*	*	*	*	*	*	*	*
EPA..................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DOE..................	1,032	663	332	332	*	*	*	35	*	*	*	*	2	*
NRC..................	516	208	169	169	*	*	*	54	83	*	*	*	2	*
AID..................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DHHS, TOTAL..........	13	*	13	13	*	*	*	*	*	*	*	*	*	*
NIH................	13	*	13	13	*	*	*	*	*	*	*	*	*	*
ADAMHA.............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER DHHS.........	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ED...................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DOD..................	363	208	112	112	*	*	*	*	43	*	*	*	*	*
COMMERCE.............	22	22	*	*	*	*	*	*	*	*	*	*	*	*
USDA.................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DOT..................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
JUSTICE..............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HUD..................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
INTERIOR.............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
OTHER................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
SOURCE UNKNOWN.......	22	*	*	*	*	*	*	*	22	*	*	*	*	*
SOURCE NOT REPORTED...	45	*	45	45	*	*	*	*	*	*	*	*	*	*
NOT SUPPORTED..........	638	441	139	139	*	*	*	*	*	*	*	58	*	*
SUPPORT STATUS UNKNOWN.	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT..............	99	50	49	49	*	*	*	*	*	*	*	*	*	*

* NO CASES REPORTED

TABLE B-29. NUMBER OF EMPLOYED DOCTORAL SCIENTISTS AND ENGINEERS BY FIELD, SUPPORTING AGENCY, AND TYPE OF EMPLOYER: 1983
CONTINUED

FIELD AND SUPPORTING AGENCY	TOTAL EMPL	BUSINESS/ INDUSTRY	EDUCATIONAL INSTITUTIONS				HOSPITAL/ CLINIC	NONPROFIT ORGS	FEDERAL GOV'T	MILITARY/ COMM. CORPS	STATE GOV'T	OTHER GOV'T	OTHER	NO REPORT
			TOTAL	4-YEAR COLL/ UNIV	2-YEAR COLL	ELEM/ SEC. SCHOOL								
SYSTEMS DESIGN ENGINEERS														
TOTAL EMPLOYED..........	3,891	2,252	881	881	*	*	*	396	252	88	22	*	*	*
TOTAL SUPPORTED........	2,09[illegible]	991	392	392	*	*	*	374	252	88	*	*	*	*
NASA..................	164	106	1	1	*	*	*	36	21	*	*	*	*	*
NSF...................	102	58	44	44	*	*	*	*	*	*	*	*	*	*
EPA...................	23	23	*	*	*	*	*	*	*	*	*	*	*	*
DOE...................	411	218	48	48	*	*	*	145	*	*	*	*	*	*
NRC...................	72	58	14	[illegible]	*	*	*	*	*	*	*	*	*	*
AID...................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
DHHS, TOTAL...........	105	50	45	45	*	*	*	10	*	*	*	*	*	*
NIH..................	33	33	*	*	*	*	*	*	*	*	*	*	*	*
ADAMHA...............	10	*	*	*	*	*	*	10	*	*	*	*	*	*
OTHER DHHS...........	[illegible]2	17	[illegible]5	45	*	*	*	*	*	*	*	*	*	*
ED....................	13	*	13	[illegible]	*	*	*	*	*	*	*	*	*	*
DOD...................	1,464	770	258	[illegible]58	*	*	*	205	143	88	*	*	*	*
COMMERCE..............	23	23	*	*	*	*	*	*	*	*	*	*	*	*
USDA..................	58	3	*	*	*	*	*	*	55	*	*	*	*	*
DOT...................	65	15	48	48	*	*	*	2	*	*	*	*	*	*
JUSTICE...............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HUD...................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
INTERIOR..............	2	2	*	*	*	*	*	*	*	*	*	*	*	*
OTHER.................	98	24	2	2	*	*	*	66	6	*	*	*	*	*
SOURCE UNKNOWN........	70	*	*	*	*	*	*	43	27	*	*	*	*	*
SOURCE NOT REPORTED...	9	9	*	*	*	*	*	*	*	*	*	*	*	*
NOT SUPPORTED..........	1,587	1,125	440	440	*	*	*	*	*	*	22	*	*	*
SUPPORT STATUS UNKNOWN.	2	2	*	*	*	*	*	*	*	*	*	*	*	*
NO REPORT..............	205	134	49	49	*	*	*	22	*	*	*	*	*	*
OTHER ENGINEERS														
TOTAL EMPLOYED..........	13,557	7,153	4,682	4,647	35	*	7	373	1,078	84	8	86	38	48
TOTAL SUPPORTED........	5,596	1,482	2,697	2,695	2	*	7	208	1,078	84	*	40	*	*
NASA..................	305	117	82	82	*	*	*	19	87	*	*	*	*	*
NSF...................	389	16	373	371	2	*	*	*	*	*	*	*	*	*
EPA...................	141	48	87	87	*	*	*	*	6	*	*	*	*	*
DOE...................	1,523	597	699	699	*	*	*	96	125	*	*	6	*	*
NRC...................	264	132	68	68	*	*	*	*	64	*	*	*	*	*
AID...................	257	59	189	189	*	*	*	9	*	*	*	*	*	*
DHHS, TOTAL...........	730	32	554	554	*	*	7	33	90	14	*	*	*	*
NIH..................	687	32	546	546	*	*	7	33	55	14	*	*	*	*
ADAMHA...............	7	*	*	*	*	*	7	*	*	*	*	*	*	*
OTHER DHHS...........	76	*	41	41	*	*	*	*	35	*	*	*	*	*
ED....................	25	*	25	25	*	*	*	*	*	*	*	*	*	*
DOD...................	1,791	833	342	342	*	*	*	105	441	70	*	*	*	*
COMMERCE..............	158	36	60	60	*	*	*	22	40	*	*	*	*	*
USDA..................	835	59	644	644	*	*	*	*	132	*	*	*	*	*
DOT...................	121	25	54	54	*	*	*	*	36	*	*	6	*	*
JUSTICE...............	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HUD...................	*	*	*	*	*	*	*	*	*	*	*	*	*	*
INTERIOR..............	251	59	123	123	*	*	*	*	69	*	*	*	*	*
OTHER.................	113	21	*	*	*	*	*	*	58	*	*	34	*	*
SOURCE UNKNOWN........	82	16	17	17	*	*	*	*	49	*	*	*	*	*
SOURCE NOT REPORTED...	33	33	*	*	*	*	*	*	*	*	*	*	*	*
NOT SUPPORTED..........	6,316	4,604	1,516	1,485	31	*	*	115	*	*	*	46	33	2
SUPPORT STATUS UNKNOWN.	133	108	10	8	2	*	*	2	*	*	8	*	5	*
NO REPORT..............	1,512	959	459	459	*	*	*	48	*	*	*	*	*	46

* NO CASES REPORTED

SOURCE: NATIONAL SCIENCE FOUNDATION

section c

reproduction of 1983 questionnaire

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1983 SURVEY OF DOCTORATE RECIPIENTS

OMB No. 3145-0020

CONDUCTED BY THE NATIONAL RESEARCH COUNCIL WITH THE SUPPORT OF THE NATIONAL SCIENCE FOUNDATION, THE NATIONAL ENDOWMENT FOR THE HUMANITIES, THE NATIONAL INSTITUTES OF HEALTH, AND THE DEPARTMENT OF ENERGY

If your name or address is incorrect, please enter correct information below.

____

____

________________________________ (10-11)

Listed below are responses that you provided to us in previous NRC doctoral surveys. Please check this information to determine if it accurately reports your status as of FEBRUARY 1983. If the data are correct, simply check the "no change" box. If the data are missing or no longer correct, please enter the correct information in the spaces provided.

	Previous Survey Response	No Change	Changes as of February 1983
Date of Birth		☐	____________ (12-16)
Institution/Year of Doctorate		☐	____________ (17-24)
Citizenship		☐	____________ (25)
Marital Status		☐	____________ (26)
Academic Rank		☐	____________ (27)
Tenure Status		☐	____________ (28-31)

What is your racial background?

1 ☐ American Indian or Alaskan Native
2 ☐ Asian or Pacific Islander
3 ☐ Black
4 ☐ White
(32)

Is your ethnic heritage Hispanic?

A ☐ Yes
B ☐ No
(33)

If YES, is it:
1 ☐ Mexican-American
2 ☐ Puerto Rican
3 ☐ Other Hispanic (34)

---

1. What was your employment status (includes postdoctoral appointment*) during February 1983?

☐ Circle your selection and enter number from below (35)

1. Employed full-time (35 hours or more/week in one position) (Skip to Question #3)
2. Employed part-time
   If you were employed part-time, were you seeking full-time employment?
   A ☐ Yes
   B ☐ No (36)
3. Postdoctoral appointment*
   If you held a postdoctoral appointment, was it
   A ☐ Full-time (Skip to Question #3)
   B ☐ Part-time (37)
4. Unemployed and seeking employment
5. Not employed and not seeking employment
6. Retired and not employed
   (Skip to Question #11)
7. Other, specify ________________

*Temporary appointment in academia, industry or government, the primary purpose of which is to provide for continued education or experience in research.

2. If you were employed part-time during FEBRUARY 1983, what was the MOST important reason for being in part-time status?

☐ Enter number from below (38)

1. Part-time employment preferred
2. Full-time position not available
3. Constraints due to family or marital status
4. Other, specify ____________________

3. Please give the name of your principal employer (company, organization, postdoctoral institution, etc. or, if self employed, write "self") and actual place of employment during FEBRUARY 1983.

____
Name of Employer (39-46)

____
City State ZIP (47-55)

4. **From the Employment Specialties List on page 4 select and enter both the number and title of the employment specialty most closely related to your principal employment or postdoctoral appointment during FEBRUARY 1983. Write in your specialty if it is not on the list.**

Number ____ Title of Employment Specialty ____ (56-58)

5. **Which category below best describes the type of your principal employment OR postdoctoral appointment during FEBRUARY 1983?**

☐ Enter number from below (59-60)

1. Business or industry (including self-employed)
2. Junior college, 2-year college, technical institute
3. Medical school (including university affiliated hospital or medical center)
4. 4-year college
5. University, other than medical school
6. Elementary or secondary school system
7. Private foundation
8. Hospital or clinic
9. U.S. military service, active duty, or Commissioned Corps, e.g., USPHS, NOAA
10. U.S. government, civilian employee
11. State government
12. Local or other government, specify ____
13. Nonprofit organization, other than those listed above
14. Other, specify ____

6. **What is your best estimate of the percentage of your professional work time that you devoted to each of the following activities during a typical week in your principal job? (Total should equal 100%)**

%

1. ____ Teaching (61)
2. ____ Basic research (63)
3. ____ Applied research (65)
4. ____ Development of equipment, products, systems, data (67)
5. ____ Design (69)
6. ____ Writing, editing (71)
7. ____ Professional services to individuals (73)
8. ____ Management of R&D (75)
9. ____ Management of educational/other programs (77)
10. ____ Consulting (79)

%

11. ____ Operations—production, maintenance, construction, installation (10)
12. ____ Quality control, testing, evaluation (12)
13. ____ Sales, marketing, purchasing, estimating (14)
14. ____ Archival work (16)
15. ____ Curatorial work (18)
16. ____ Performing arts (20)
17. ____ Other, specify ____ (22)

TOTAL = 100%

What were your primary and secondary work activities? (Enter number 1-17 from question #6 above) ☐ Primary (24-25) ☐ Secondary (26-27)

7. **What was the basic annual salary* associated with your principal professional employment during FEBRUARY 1983? If you were on a postdoctoral appointment (see question #1 for definition), what was your stipend plus allowances?** $____ per year (28-30)

Check whether salary was for ☐ 9-10 months or ☐ 11-12 months (31)

*Basic salary is your annual salary before deductions for income tax, social security, retirement, etc., but does not include bonuses, overtime, summer teaching, or other payment for professional work.

8. **If you were employed during FEBRUARY 1983 in a specialty field other than your field of Ph.D., what was the MOST important reason for being in that position?**

☐ Enter number from below (32)

1. Better pay
2. More attractive career options
3. Preferred specific geographic location
4. Constraints due to family or marital status
5. Position in Ph.D. field not available
6. Promoted into new field
7. Other, specify ____

9. **If you were employed in a non-academic job in FEBRUARY 1983, what was the MOST important reason for your decision to enter this job?**

☐ Enter number from below (33)

1. Better pay
2. More attractive career options
3. Preferred specific geographic location
4. Constraints due to family or marital status
5. Academic position not available
6. Other, specify ____

10. **During 1982 was any of your work supported or sponsored by U.S. Government funds?**

A ☐ Yes B ☐ No C ☐ Don't Know (34)

If YES, which Federal agencies or departments supported the work? Enter number(s) from the List of Federal Supporting Agencies on page 4.

____ (35-46)

11. **How many full-time equivalent years of professional work experience have you had?** ____ Year(s) (47-48)

12. Following the receipt of your doctorate, did you leave the work force for any period of at least one year in duration?

A ☐ Yes
B ☐ No
(49)

If YES, indicate the beginning and ending years of career disruptions:

_________ to _________ (50-53)
_________ to _________ (54-57)
_________ to _________ (58-61)

13. Have you received any external research support (for at least three months) from any of the following non-government sources in the past two years?

A ☐ Yes B ☐ No If YES, specify below

1. ______ Industry
2. ______ Private Foundations
3. ______ Academe
4. ______ Other, specify ______________________ (63-66)

14. Please indicate the number of publications you have authored or co-authored in the following categories during the past two years.

1981-82

1. Books __________ (67-68)
2. Chapters in books __________ (69-70)
3. Monographs and Reports __________ (71-72)
4. Journal articles __________ (73-74)
5. Book reviews __________ (75-76)
6. If NONE, check box ☐ (77)

15. After receiving your doctorate, did you have to acquire formal training in any of the following areas in order to obtain your present position?

A ☐ Yes B ☐ No (10) If YES, specify below

1. _____ Foreign languages
2. _____ Computer science
3. _____ Management and administration
4. _____ Survey research and statistics
5. _____ Other, specify ______________________ (11-15)

16. Please specify the type and field of any degree(s) you have received after your initial doctorate.

____ (16-27)

If you devoted a proportion of your professional time which you considered significant to energy or fuel activities during a typical work week, please answer questions #17-20, otherwise skip to item #21.

17. What percent of your professional time did you devote to energy and fuel during a typical week? ________ (28-29)
percent

18. From the list below, give the corresponding number of the ONE energy source that involved the LARGEST proportion of your energy-related work during a typical week.

☐ Enter number from below (30)

1. Coal and coal products
2. Petroleum (including oil shale and tar sands) or natural gas
3. Fission
4. Fusion
5. Hydroenergy
6. Direct solar (including space and water heating, thermal, electric)
7. Indirect solar (winds, tides, biomass, etc.)
8. Geothermal
9. Other, specify ______________________

19. Please read the following list of energy-related activities and give the corresponding number(s) from the list below of the activity(ies) in which you were engaged during a typical week. Enter number(s) from below ______________ (31-50)

1. Exploration
2. Extraction (gas, oil, mining)
3. Manufacture of energy-related components or products
4. Fuel processing (including refining and enriching)
5. Electric power generation
6. Transportation, transmission, distribution of fuel or energy
7. Energy storage
8. Energy utilization, management
9. Fuel reprocessing or disposal
10. Energy conservation
11. Environmental impact (health, economic, etc.)
12. Education, training
13. Other, specify ______________________

20. Please enter the number 1-13 from question #19 that BEST describes the activity in which you spent MOST of your energy-related time. ☐ (51-52)

21. Thank you for completing this questionnaire. Please return the completed form in the enclosed envelope to the National Research Council, JH630, 2101 Constitution Avenue, Washington, D.C. 20418.

EMPLOYMENT SPECIALTIES LIST

MATHEMATICAL SCIENCES

000 - Algebra
010 - Analytis & Functional Analysis
020 - Geometry
030 - Logic (see also 834)
040 - Number Theory
052 - Probability
055 - Math. Statistics (see also 544, 670, 725, 727)
060 - Topology
082 - Operations Research (see also 478)
085 - Applied Mathematics
089 - Combinatorics & Finite Mathomatics
098 - Mathematics, General
099 - Mathematics, Other*

COMPUTER AND INFORMATION SCIENCES

071 - Theory
072 - Software Systems
073 - Hardware Systems
074 - Intelligent Systems
079 - Computer Sciences, Other* (see also 437, 476)
081 - Information Sci. & Systems*

PHYSICS & ASTRONOMY

101 - Astronomy
102 - Astrophysics
110 - Atomic & Molecular
120 - Electromagnetism
132 - Acoustics
134 - Fluids
135 - Plasma
136 - Optics
140 - Elementary Particles
150 - Nuclear Structure
157 - Polymer
160 - Solid State
198 - Physics, General
199 - Physics, Other*

CHEMISTRY

200 - Analytical
210 - Inorganic
215 - Synthetic Inorganic & Organometallic
220 - Organic
225 - Synthetic Organic & Natural Products
230 - Nuclear
240 - Physical
250 - Theoretical
255 - Structural
260 - Agricultural & Food
270 - Pharmaceutical
275 - Polymer
280 - Biochemistry (see also 540)
298 - Chemistry, General
299 - Chemistry, Other*

EARTH, ENVIRONMENTAL, AND MARINE SCIENCES

301 - Mineralogy, Petrology
305 - Geochemistry
310 - Stratigraphy, Sedimentation
320 - Paleontology
330 - Structural Geology
341 - Geophysics (Solid Earth)
350 - Geomorph. & Glacial Geology
391 - Applied Geol., Geol. Engr. & Econ. Geol.
398 - Earth Sciences, General
399 - Earth Sciences, Other*
381 - Atmospheric Physics & Chemistry
382 - Atmospheric Dynamics
383 - Atmos. & Meteorol. Sci., Other*
388 - Environmental Sciences, General (see also 480, 528)
389 - Environmental Sciences, Other*
360 - Hydrology & Water Resources
370 - Oceanography
397 - Marine Sciences, Other*

ENGINEERING

400 - Aerospace, Aeronautical & Astronautical
410 - Agricultural
415 - Bioengineering & Biomedical
420 - Civil
430 - Chemical
435 - Ceramic
436 - Communications
437 - Computer
440 - Electrical
445 - Electronics
450 - Industrial & Manufacturing
455 - Nuclear
460 - Engineering Mechanics
465 - Engineering Physics
470 - Mechanical
475 - Metallurgical & Phys. Met. Engr.
476 - Systems Design & Systems Science (see also 072, 073, 074)
478 - Operations Research (see also 082)
479 - Fuel Technology & Petroleum
480 - Sanitary & Environmental Health
485 - Naval Arch. & Marine Engr.
486 - Mining & Mineral
487 - Ocean
490 - Polymer
497 - Materials Science & Engineering
498 - Engineering, General
499 - Engineering, Other*

AGRICULTURAL SCIENCES

501 - Agricultural Economics
508 - Animal Breeding & Genetics
509 - Animal Nutrition
512 - Animal Sciences, Other*
500 - Agronomy
511 - Plant Path. (see also 553)
513 - Plant Breeding & Genetics
514 - Plant Sciences, Other*
503 - Food Science and/or Technology (see also 573)
505 - Forestry
506 - Horticulture
507 - Soil Sciences
515 - Fisheries Sciences
516 - Wildlife Management
518 - Agriculture, General
519 - Agriculture, Other*

MEDICAL SCIENCES

520 - Medicine & Surgery
522 - Public Health & Epidemiology
523 - Veterinary Medicine
524 - Hospital Administration
526 - Nursing
527 - Parasitology
528 - Environmental Health
530 - Audiology & Speech Pathology
534 - Human and Animal Pathology
536 - Pharmacology
537 - Pharmacy
538 - Medical Sciences, General
539 - Medical Sciences, Other*

BIOLOGICAL SCIENCES

540 - Biochemistry (see also 280)
542 - Biophysics
550 - Botany
551 - Bacteriology
552 - Plant Genetics
553 - Plant Path. (see also 511)
567 - Plant Physiology
563 - Human & Animal Genetics
566 - Human & Animal Physiology
569 - Zoology
544 - Biometrics & Biostatistics (see also 055, 670, 725, 727)
545 - Anatomy
546 - Cell Biology
547 - Embryology
548 - Immunology
549 - Endocrinology
560 - Ecology
571 - Entomology
572 - Molecular Biology
573 - Food Science and/or Technology (see also 503)
574 - Behavior/Ethnology
575 - Microbiology
576 - Nutrition & Dietetics
589 - Neurosciences
590 - Toxicology
598 - Biological Sciences, General
599 - Biological Sciences, Other*

PSYCHOLOGY

600 - Clinical
603 - Cognitive
610 - Counseling & Guidance
620 - Developmental & Gerontological
630 - Educational
635 - School
641 - Experimental
642 - Comparative
643 - Physiological
650 - Industrial/Organizational
660 - Personality
670 - Psychometrics (see also 055, 544, 725, 727)
675 - Quantitative
680 - Social
698 - Psychology, General
699 - Psychology, Other*

SOCIAL SCIENCES

700 - Anthropology
703 - Archeology
708 - Communications
709 - Linguistics
710 - Sociology
720 - Economics (see also 501)
725 - Econometrics (see also 055, 544, 670, 727)
727 - Social Statistics (see also 055, 544, 670, 725)
730 - Demography
740 - Geography
745 - Area Studies*
751 - Political Sci. & Government
752 - Public Administration
753 - Public Policy Studies
755 - International Relations
760 - Criminology & Criminal Justice
770 - Urban & Regional Planning
775 - History & Philosophy of Sci.
798 - Social Sciences, General
799 - Social Sciences, Other*

HUMANITIES

804 - History, American
805 - History, European
806 - History, Other*

811 - American Literature
813 - English Language
814 - English Literature
827 - Classics
831 - Speech & Debate
836 - Comparative Literature
839 - Letters, Other*

821 - German
822 - Russian
823 - French
824 - Spanish & Portuguese
826 - Italian
829 - Other Languages*

802 - Art History & Criticism
808 - American Studies
809 - Theatre & Theatre Criticism
830 - Music
833 - Religious Studies (see also 881)
834 - Philosophy (see also 030)
891 - Library & Archival Sciences
878 - Humanities, General
879 - Humanities, Other*

EDUCATION AND PROFESSIONAL FIELDS

801 - Applied Art
881 - Theology (see also 833)
882 - Business & Management
883 - Home Economics
884 - Journalism
886 - Law, Jurisprudence
887 - Social Work
888 - Architec. & Environ. Design
896 - Professional Fields, General
897 - Professional Fields, Other*
938 - Education (other than teaching in a field listed above)

899 - OTHER FIELDS*

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*Identify the specific field in the space on the questionnaire.

LIST OF FEDERAL SUPPORTING AGENCIES (For use with # 10)

1. Agency for International Development
2. Environmental Protection Agency
3. National Aeronautics & Space Administration
4. National Endowment for the Arts
5. National Endowment for the Humanities
6. National Science Foundation
7. Nuclear Regulatory Commission
8. Smithsonian Institution
9. Department of Agriculture
10. Department of Commerce
11. Department of Defense
12. Department of Energy
13. National Institutes of Health (DHHS)
14. Alcohol, Drug Abuse & Mental Health Administration (NIAA, NIDA, NIMH)
15. Other DHHS, specify ______________
16. Department of Education (NIE, OE, NCES)
17. Department of Housing and Urban Development
18. Department of the Interior
19. Department of Justice
20. Department of Labor
21. Department of State
22. Department of Transportation
23. Other agency or department, specify ______________
24. Don't know source agency

other science resources publications

Science Resources Studies Highlights

R&D Funds

	NSF No.	Price
"Academic R&D Funding Increased 7% in FY 1983; Higher Gains Expected Through 1985"	85-	In press
"7% Real Growth Expected in 1985 National R&D Expenditures: Defense and Economy Major Factors"	85-304	-----
"Defense and Space Research and Development Emphasized in 1985 Budget"	84-333	-----
"Plans for Company-Funded Research and Development Show 12% Annual Increases Through 1985"	84-329	-----
"1983 Plant Biology Research Expenditures Totaled $200 Million and Were Concentrated in Land-grant Institutions"	84-327	-----
"Despite Recession, Companies' Own R&D Funding Rose 13% During 1982"	84-324	-----
"Federal Academic Obligations Increased by 13% in 1982, 5% in Real Dollars"	84-305	-----
"Real Growth in Federal R&D Funds Estimated at 12% in 1984—Largest Increase Since Midsixties"	84-302	-----
"Dollar Value of U.S. R&D Expenditures Overseas Declined in 1982"	83-329	-----
"Companies Plan Increases in R&D Spending Through 1984"	83-327	-----

S/E Personnel

	NSF No.	Price
"Science and Engineering Employment in Academia Grew 3% in 1983"	84-317	-----
"Graduate Science/Engineering Enrollment Grew by 2% Between Fall 1981 and 1982, With Computer Sciences, Up 20%, Leading Growth"	84-313	-----
"One-fourth of Academic Research Equipment Classified Obsolete"	84-312	-----
"Industry Reports Shortages of Scientists and Engineers Down Substantially From 1982 to 1983"	84-303	-----
"No Change Seen in Science and Engineering Student Quality Seen by 60% of Academic Officials: At Least 25% Perceive Improvement"	83-322	-----
"Growth in Neuroscience May Be Leveling Off"	83-314	-----

Detailed Statistical Tables

R&D Funds

	NSF No.	Price
Federal Funds for Research and Development, Fiscal Years 1983, 1984, and 1985, Volume XXXIII	84-336	-----
Research and Development in Industry, 1982. Funds, 1982; Scientists and Engineers, January 1983	84-325	-----
Academic Science/Engineering: R&D Funds, Fiscal Year 1982	84-308	-----

S/E Personnel

	NSF No.	Price
Academic Science/Engineering: Graduate Enrollment and Support, Fall 1983	85-300	In press
Scientists, Engineers, and Technicians in Trade and Regulated Industries: 1982	84-320	-----
Academic Science/Engineering: Scientists and Engineers, January 1983	84-309	-----
Science and Engineering Doctorates: 1960-82	83-328	-----

Reports

R&D Funds

	NSF No.	Price
Federal Funds for Research and Development, Fiscal Years 1982, 1983, and 1984, Volume XXXII	84-326	-----
Trends in Small Companies' R&D Expenditures	84-324	-----
Federal R&D Funding by Budget Function: Fiscal Years 1983-85	84-316	-----
Federal Support to Universities, Colleges, and Selected Nonprofit Institutions, Fiscal Year 1982	84-315	-----

S/E Personnel

	NSF No.	Price
Scientific and Technical Work Force in Trade and Regulated Industries Shows Major Shift in Occupational Composition: 1979-82	84-323	-----

Composite

	NSF No.	Price
Resources Supporting Scientific and Engineering Activities at Historically Black Colleges and Universities	84-332	-----
Science and Technology Data Book	84-331	-----
Academic Science/Engineering: 1972-83. R&D Funds, Federal Support, Scientists and Engineers, Graduate Enrollment and Support	84-322	-----
National Patterns of Science and Technology Resources: 1984	84-311	-----
A Guide to NSF Science/Engineering Resources Data	84-301	-----